04 - STRUCTURES INDEX OF DRAWINGS

| DRAWING NUMBER | DRAWING TITLE | DRAWING NUMBER | DRAWING TITLE |
|-------------------|-------------------------------------|-------------------|-------------------------------------|
| S-01 | STRUCTURE INDEX - 1 | S-25 | 03312 - ABUTMENT 2 PLAN & ELEVATION |
| S-02 | STRUCTURE INDEX - 2 | S-26 | 03312 - PIER 1 PLAN & ELEVATION |
| S-03 | OVERALL PLAN | S-27 | 03312 - PIER 2 PLAN & ELEVATION |
| S-04 | GENERAL NOTES & QUANTITIES | S-28 | 03312 - PIER 3 PLAN & ELEVATION |
| S-05 | 03311 - GENERAL PLAN | S-29 | 03312 - PIER 4 PLAN & ELEVATION |
| S-06 | 03311 - SCOPE OF WORK | S-30 | 03312 - PIER 5 PLAN & ELEVATION |
| S-07 | 03311 - CONSTRUCTION STAGING | S-31 | 03312 - PIER 6 PLAN & ELEVATION |
| S-08 | 03311 - ABUTMENT 1 PLAN & ELEVATION | S-32 | 03312 - PIER 7 PLAN & ELEVATION |
| S-09 | 03311 - ABUTMENT 2 PLAN & ELEVATION | S-33 | 03312 - FRAMING PLAN - 1 |
| S-10 | 03311 - PIER 1 PLAN & ELEVATION | S-34 | 03312 - FRAMING PLAN - 2 |
| S-11 | 03311 - PIER 2 PLAN & ELEVATION | S-35 | 03312 - FRAMING PLAN - 3 |
| S-12 | 03311 - PIER 3 PLAN & ELEVATION | S-36 | 03312 - GIRDER SCHEDULE - 1 |
| S-13 | 03311 - PIER 4 PLAN & ELEVATION | S-37 | 03312 - GIRDER SCHEDULE - 2 |
| S-14 | 03311 - PIER 5 PLAN & ELEVATION | S-38 | 03312 - PIN REPLACEMENT DETAILS |
| S-15 | 03311 - FRAMING PLAN - 1 | S-39 | 03312 - DECK PLAN & DETAILS |
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| S-18 | 03311 - PIN REPLACEMENT DETAILS | S-42 | 03313 - CONSTRUCTION STAGING |
| S-19 | 03311 - PIN REPLACEMENT DETAILS | S-43 | 03313 - ABUTMENT 1 PLAN & ELEVATION |
| S-20 | 03311 - DECK PLAN & DETAILS | S-44 | 03313 - ABUTMENT 2 PLAN & ELEVATION |
| S-21 | 03312 - GENERAL PLAN | S-45 | 03313 - PIER 1 PLAN & ELEVATION |
| S-22 | 03312 - SCOPE OF WORK | S-46 | 03313 - PIER 2 PLAN & ELEVATION |
| S-23 | 03312 - CONSTRUCTION STAGING | S-47 | 03313 - PIER 3 PLAN & ELEVATION |
| S-24 | 03312 - ABUTMENT 1 PLAN & ELEVATION | S-48 | 03313 - PIER 4 PLAN & ELEVATION |



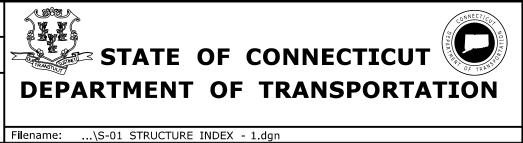
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| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
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DESIGNER/DRAFTER:

JRA

CHECKED BY:

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PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| PLAINVILLE & NEW BRITAIN | | |
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| STRUCTURE INDEX | _ | 1 |

PROJECT NO.

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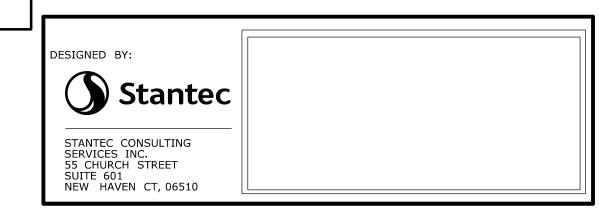
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04 - STRUCTURES INDEX OF DRAWINGS

| DRAWING NUMBER | DRAWING TITLE | DRAWING NUMBER | DRAWING TITLE |
|-------------------|-------------------------------------|-------------------|---------------------------------------|
| S-49 | 03313 - PIER 5 PLAN & ELEVATION | S-73 | 03322 - ABUTMENT 1 PLAN & ELEVATION |
| S-50 | 03313 - PIER 6 PLAN & ELEVATION | S-74 | 03322 - ABUTMENT 2 PLAN & ELEVATION |
| S-51 | 03313 - PIER 7 PLAN & ELEVATION | S-75 | 03322 - PIER 1 PLAN & ELEVATION |
| S-52 | 03313 - PIER 8 PLAN & ELEVATION | S-76 | 03322 - PIER 2 PLAN & ELEVATION |
| S-53 | 03313 - FRAMING PLAN - 1 | S-77 | 03322 - PIER 3 PLAN & ELEVATION |
| S-54 | 03313 - FRAMING PLAN - 2 | S-78 | 03322 - PIER 4 PLAN & ELEVATION |
| S-55 | 03313 - FRAMING PLAN - 3 | S-79 | 03322 - FRAMING PLAN - 1 |
| S-56 | 03313 - GIRDER SCHEDULE | S-80 | 03322 - FRAMING PLAN - 2 |
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| S-58 | 03313 - DECK PLAN & DETAILS - 1 | S-82 | 03322 - DECK PLAN & DETAILS |
| S-59 | 03313 - DECK PLAN & DETAILS - 2 | S-83 | CONCRETE REPAIR DETAILS - 1 |
| S-60 | 03320 - GENERAL PLAN | S-84 | CONCRETE REPAIR DETAILS - 2 |
| S-61 | 03320 - SCOPE OF WORK | S-85 | DECK JOINT REPAIR DETAILS |
| S-62 | 03320 - CONSTRUCTION STAGING | S-86 | PARAPET & HAUNCH MODIFICATION DETAILS |
| S-63 | 03320 - ABUTMENT 1 PLAN & ELEVATION | S-87 | SCUPPER REPAIR DETAILS |
| S-64 | 03320 - ABUTMENT 2 PLAN & ELEVATION | S-88 | TYPICAL APPROACH RAIL DETAILS |
| S-65 | 03320 - PIER 1 PLAN & ELEVATION | S-89 | SUGGESTED TEMPORARY SUPPORT - 1 |
| S-66 | 03320 - PIER 2 PLAN & ELEVATION | S-90 | SUGGESTED TEMPORARY SUPPORT - 2 |
| S-67 | 03320 - FRAMING PLAN | S-91 | STEEL REPAIRS DETAILS - 1 |
| S-68 | 03320 - GIRDER SCHEDULE | S-92 | STEEL REPAIRS DETAILS - 2 |
| S-69 | 03320 - DECK PLAN & DETAILS | S-93 | 03322 - BEARING DETAILS |
| S-70 | 03322 - GENERAL PLAN | S-94 | 03322 - KEEPER BLOCK DETAILS |
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| S-72 | 03322 - CONSTRUCTION STAGING | | |



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PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| PLAINVILLE NEW BRITA | |
|-------------------------|---------|
| DRAWING TITLE: | |
| STRUCTURE IN | DEX - 2 |

PROJECT NO.

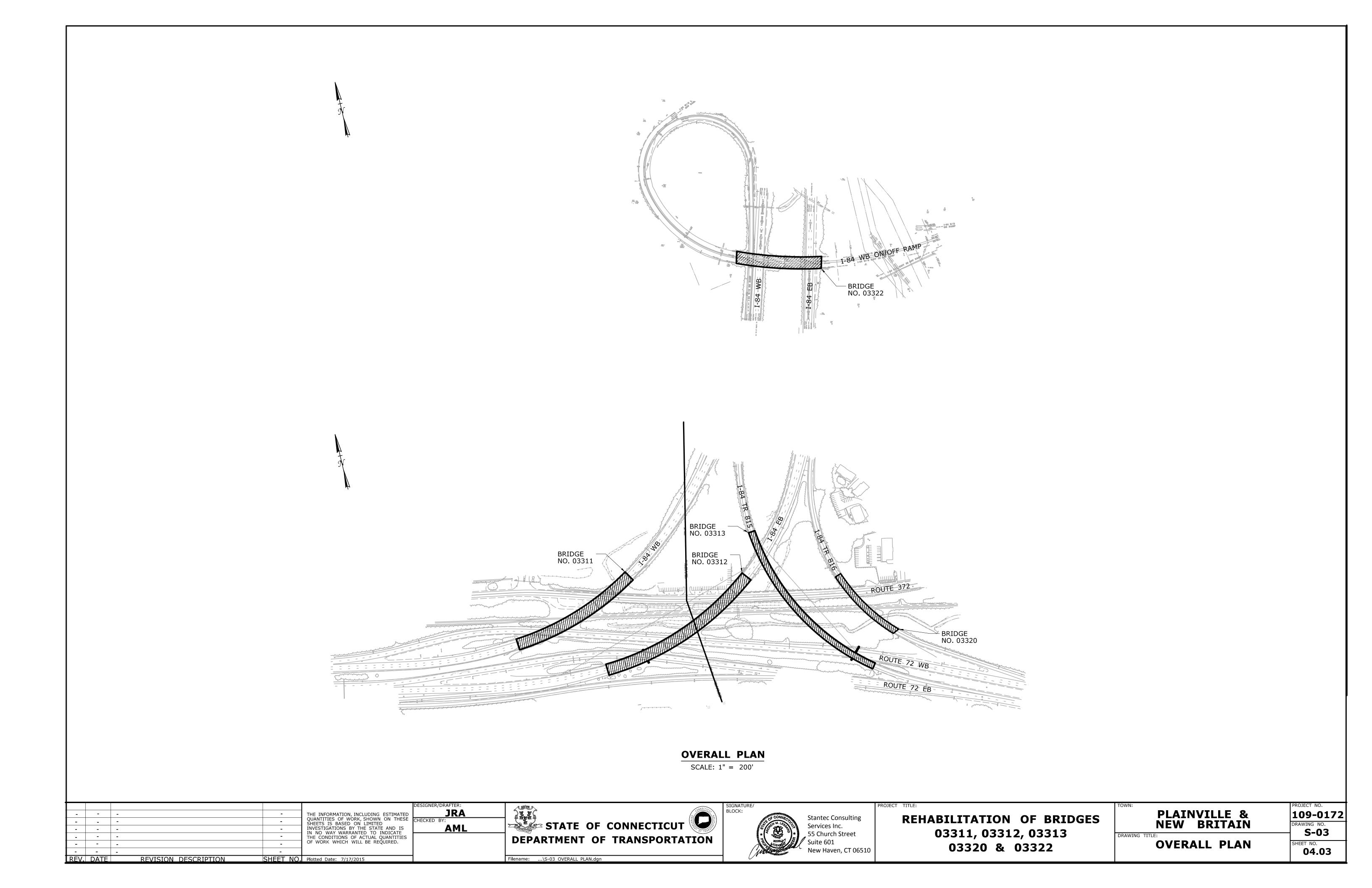
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S-02

SHEET NO.

04.02



GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2015 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: LRFD BRIDGE DESIGN SPECIFICATIONS (AASHTO - 2012), WITH INTERIM SPECIFICATIONS UP TO AND INCLUDING 2013, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).

ALLOWABLE DESIGN STRESSES:

CLASS "A" CONCRETE:

BASED ON f'c = 3,300 psi

CLASS "F" CONCRETE:

BASED ON f'c = 4,400 psi

THE SPECIFIED CONCRETE STRENGTH USED IN DESIGN, f'c, OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF "SECTION 6.01 CONCRETE FOR STRUCTURES".

REINFORCEMENT:

ASTM A615 GRADE 60

Fy = 60,000 psi

EXISTING STRUCTURAL STEEL (PER ORIGINAL DRAWINGS): Fy = 36,000 psiASTM A36

NEW STRUCTURAL STEEL: AASHTO M270 GRADE 50

Fy = 50,000 psi

LIVE LOAD: HL-93 DESIGN VEHICLE CT-L73.0 LEGAL VEHICLE CT-L3S2 LEGAL VEHICLE CT-P76.5 PERMIT VEHICLE CT-P204 PERMIT VEHICLE CT-P380 PERMIT VEHICLE CT-TLC PERMIT VEHICLE

FUTURE PAVING ALLOWANCE: NONE

STRUCTURAL STEEL: SEE STRUCTURE NOTES FOR DESIGNATIONS AND REQUIREMENTS.

PAINT: PAINT SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIAL PROVISION "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)" OR "STRUCTURAL STEEL REPAIRS (SITE NO. X)", AS APPLICABLE.

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF TWO LIFTS. THE FIRST SHALL BE HMA S0.25 (1" THICK) AND THE SECOND SHALL BE HMA S0.5 (2" THICK).

DIMENSIONS: WHEN DECIMAL DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

TRAFFIC: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIAL PROVISIONS "MAINTENANCE AND PROTECTION OF TRAFFIC" AND "PROSECUTION AND PROGRESS".

UTILITIES: THE CONTRACTOR SHALL TAKE PROPER PRECAUTIONS TO ENSURE THERE WILL BE NO DISRUPTION TO EXISTING UTILITIES WHILE COMPLETING THE WORK, UNLESS OTHERWISE AGREED TO BY THE STATE AND AFFECTED UTILITY. UTILITIES SHALL BE NOTIFIED PRIOR TO COMMENCING WORK ADJACENT TO OR POTENTIALLY AFFECTING UTILITIES, 2 WEEKS PRIOR TO THE START OF WORK.

RAILROAD: SEE APPLICABLE NOTICE TO CONTRACTOR.

BRIDGE IDENTIFICATION: FOR THIS CONTRACT, THE BRIDGES WILL BE IDENTIFIED AS FOLLOWS:

BRIDGE SITE NO. 03311 03312 03313 03320 03322

ILLUMINATION NOTES

REVISION DESCRIPTION

REV. DATE

1. THE CONTRACTOR SHALL PERFORM ALL WORK IN SUCH A MANNER SO THAT THE NIGHTTIME HIGHWAY ILLUMINATION REMAINS OPERATIONAL THROUGHOUT ALL STAGES OF CONSTRUCTION. THERE SHALL BE NO DIRECT PAYMENT FOR MAINTAINING ILLUMINATION, THE COST OF WHICH SHALL BE INCLUEDED IN THE OVERALL COST OF THE PROJECT.

GENERAL REPAIR NOTES

ASSOCIATES

BOLTED REPAIRS.

1. THE DETERIORATION AND REPAIR DIMENSIONS SHOWN HEREIN ARE BASED ON LIMITED FIELD OBSERVATIONS AND BRIDGE SAFETY AND INSPECTION REPORTS AS FOLLOWS:

BRIDGE 03311: REPORT DATED APRIL 22, 2014 BY GM2 ASSOCIATES

BRIDGE 03312: REPORT DATED APRIL 22, 2014 BY GM2 ASSOCIATES

BRIDGE 03313: REPORT DATED APRIL 22, 2014 BY GM2

ASSOCIATES BRIDGE 03320: REPORT DATED APRIL 22, 2014 BY GM2

ASSOCIATES

BRIDGE 03322: REPORT DATED MAY 20, 2013 BY PENNONI

2. THE INFORMATION DEPICTED ON THE PLANS HEREIN IS INTENDED TO BE USED AS A GUIDE AND DOES NOT NECESSARILY REFLECT THE CURRENT CONDITION OF THE STRUCTURES. THE EXACT LOCATION AND LIMITS OF DETERIORATION TO BE REPAIRED AND THE PROPOSED REPAIR DETAIL SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION. NO MATERIAL SHALL BE ORDERED OR FABRICATED UNTIL THE ENGINEER HAS APPROVED REPAIR LOCATIONS. REPAIRS MAY CONSIST OF WELDED OR

SUBSTRUCTURE REPAIR NOTES

- 1. THE CONTRACTOR SHALL PROVIDE SAFE ACCESS TO THE PIERS AND ABUTMENTS FOR THE ENGINEER TO DELINEATE AND REVIEW THE REPAIR WORK. THE COST OF PROVIDING ACCESS SHALL BE INCLUDED IN THE COST OF THE APPLICABLE REPAIR ITEMS.
- 2. THE CONTRACTOR SHALL NOT PERFORM ANY REPAIR WORK WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 3. SPALLS AND HOLLOW AREAS SHALL BE REPAIRED WITH "CLASS 'S' CONCRETE" OR "VARIABLE DEPTH PATCH", AS DIRECTED BY THE ENGINEER.
- 4. REPAIRS AT THE END OF PRESTRESSED PIER CAPS (WITHIN 2'-0" OF THE PIER CAP END) SHALL BE PAID FOR UNDER THE ITEM "REPAIR TO EXISTING PIERS". ALL OTHER PIER REPAIRS SHALL BE PAID FOR UNDER THE ITEM "CLASS 'S' CONCRETE" OR "VARIABLE DEPTH PATCH", AS APPLICABLE.

STEEL REPAIR NOTES

PAINTING NOTES

- 1. THE REPAIR OF EXISTING STRUCTURAL STEEL SHALL BE PAID FOR UNDER THE ITEM "STRUCTURAL STEEL REPAIRS (SITE NO. X)".
- 2. REMOVAL OF DETERIORATED PORTIONS OF EXISTING STRUCTURAL STEEL REGARDLESS OF REMOVAL METHODS SHALL NOT BE MEASURED FOR PAYMENT, THE COST OF WHICH SHALL BE INCLUDED IN THE ITEM "STRUCTURAL STEEL REPAIRS (SITE NO.
- 3. ALL STRUCTURAL STEEL REPAIR PLATES, ANGLES, AND CHANNELS SHALL CONFORM TO AASHTO M270 GRADE 50 T2.
- 4. STAINLESS STEEL PINS SHALL CONFORM TO ASTM A276.
- 5. ALL REPAIR FILLET WELDS SHALL BE INSPECTED BY THE MAGNETIC PARTICLE METHOD. ALL COMPLETE JOINT PENETRATION WELDS SHALL BE INSPECTED BY ULTRASONIC TESTING.
- 6. LOOSE BOLTS SHALL BE TORQUED AS DIRECTED BY THE ENGINEER. THIS WORK SHALL NOT BE MEASURED FOR PAYMENT, THE COST OF WHICH SHALL BE INCLUDED IN THE ITEM "STRUCTURAL STEEL REPAIRS (SITE NO. X)"
- 7. AT LOCATIONS WHERE MISSING OR DAMAGED, PROVIDE NEW BOLTS, WASHERS, AND NUTS. THIS WORK SHALL BE INCLUDED IN THE ITEM "STRUCTURAL STEEL REPAIRS (SITE NO. X)".

1. ALL NEW STEEL REPAIR ELEMENTS SHALL BE PAINTED, AND SHALL BE SHOP PRIMED.

TEMPORARY SUPPORT NOTES

- 1. AT EXISTING HAMMERHEAD CONCRETE PIERS, THE CONTRACTOR SHALL DESIGN AND INSTALL A TEMPORARY GIRDER SUPPORT SYSTEM THAT FULLY SUPPORTS BOTH BRIDGE SPANS THAT ARE SUPPORTED BY THE PIER . THIS SUPPORT SHALL BE UTILIZED WHILE REPAIRS TO THE EXISTING CONCRETE PIER CAPS ARE BEING COMPLETED. THE SUPPORTS MAY UTILIZE THE EXISTING CONCRETE PIER COLUMN FOR LATERAL STABILITY IF SUCH CAPACITY CAN BE DEMONSTRATED.
- 2. AT EXISTING STEEL STRADDLE BENTS, THE CONTRACTOR SHALL DESIGN AND INSTALL A TEMPORARY STRINGER SUPPORT SYSTEM THAT PROVIDES STRINGER SUPPORT WHILE THE BRIDGE PINS ARE BEING REPLACED.
- 3. AT EXISTING HAMMERHEAD CONCRETE PIER CAPS, THE EXISTING VERTICAL CLEARANCES SHALL BE MAINTAINED ACROSS THE ENTIRE ACTIVE ROADWAY AT ALL TIMES. AT STEEL STRADDLE BENTS, A MINIMUM VERTICAL CLEARANCE OF 16'-3" SHALL BE MAINTAINED ACROSS THE ENTIRE ACTIVE ROADWAY AT ALL TIMES.
- 4. A MINIMUM VERTICAL CLEARANCE OF 20'-6" SHALL BE MAINTAINED AT ALL TIMES ABOVE THE RAILROAD.
- 5. THE CONTRACTOR SHALL CONSIDER THESE REQUIREMENTS, TOGETHER WITH MAINTENANCE AND PROTECTION OF TRAFFIC PHASES, DURING THE DESIGN AND SEQUENCING OF ALL TEMPORARY WORKS, INCLUDING TEMPORARY GIRDER SUPPORT SYSTEMS, JACKING FRAMES, WORK PLATFORMS, AND CONTAINMENT
- 6. NO WORK SHALL BE PERFORMED ABOVE ACTIVE PORTIONS OF THE ROADWAY AT ANY TIME.
- 7. TEMPORARY GIRDER SUPPORT SYSTEMS AT PIERS SHALL BE PAID FOR UNDER THE LUMP SUM ITEM "JACKING EXISTING SUPERSTRUCTURE (SITE NO. X)".
- 8. JACKING AND/OR TEMPORARY SUPPORT FOR THE REPLACEMENT OF EXPANSION BEARINGS AT BRIDGE 03322 SHALL BE INCLUDED IN THE ITEM "JACKING FOR BEARING REPLACEMENT", FOR EACH STRINGER JACKED FOR BEARING REPLACEMENT.
- 9. TEMPORARY SUPPORT SYSTEM USED FOR REPLACING EXISTING BRIDGE PINS AT BRIDGE 03311, 03312, AND 03313 SHALL BE INCLUDED IN THE ITEM "TEMPORARY SUPPORT ASSEMBLY", FOR EACH PAIR OF STRINGERS SUPPORTED FOR PIN REPLACEMENT.

TEMPORARY SUPPORT NOTES

- 1. DESIGNING, FURNISHING, INSTALLING AND REMOVING ACCESS PLATFORMS TO FACILITATE REPAIR OF STEEL BEAMS, UNDERSIDE OF DECK, PIERS, AND ABUTMENTS, AND TO FACILITATE ACCESS TO THE SAME BY THE ENGINEER, WILL NOT BE MEASURED FOR PAYMENT, THE COST OF WHICH SHALL BE INCLUDED IN THE OVERALL COST OF THE PROJECT.
- 2. WORK PLATFORMS SHALL NOT EXTEND OVER ACTIVE LANES OF THE ROADWAY.

| TABLE OF BRIDGE QUANTITIES | | |
|---|----------|----------|
| ITEM | UNIT | QUANTITY |
| LEAD COMPLIANCE FOR MISCELLANEOUS EXTERIOR TASKS | LS | LS |
| LEAD COMPLIANCE FOR ABRASIVE BLAST CLEANING | LS | LS |
| HMA S0.5 | TON | 1903 |
| HMA S0.25 | TON | 951 |
| REMOVAL OF EXISTING WEARING SURFACE | SY | 15736 |
| REMOVAL OF BRIDGE DECK CONCRETE | CY | 7 |
| JACKING EXISTING SUPERSTRUCTURE (SITE NO. 1) | LS | LS |
| JACKING EXISTING SUPERSTRUCTURE (SITE NO. 2) | LS | LS |
| JACKING EXISTING SUPERSTRUCTURE (SITE NO. 3) | LS | LS |
| JACKING EXISTING SUPERSTRUCTURE (SITE NO. 4) | LS | LS |
| JACKING FOR BEARING REPLACEMENT | EA | 16 |
| EXTEND EXISTING WEEPHOLES | EA | 20 |
| BRIDGE SCUPPER-FIBERGLASS HOPPER | EA | 5 |
| ASPHALTIC PLUG EXPANSION JOINT SYSTEM | CF | 687 |
| BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS | EA | 16 |
| CLEAN AND LUBRICATE EXISTING BEARINGS | EA | 1 |
| CONSTRUCT CONCRETE KEEPER BLOCKS | EA | 2 |
| MODIFY BRIDGE PARAPET | LF | 850 |
| BRIDGE PARAPET CAP | LF | 5521 |
| CLASS "S" CONCRETE | CF | 787 |
| VARIABLE DEPTH PATCH | CF | 524 |
| SURFACE PATCH | SF | 13065 |
| CLASS "F" CONCRETE | + | 9 |
| | CY | _ |
| REPAIR TO EXISTING PIERS | CF | 800 |
| FULL DEPTH PATCH (HIGH EARLY STRENGTH CONCRETE) | CY | 241 |
| PARTIAL DEPTH PATCH | CF | 5598 |
| 1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES | SF | 55 |
| 1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES | SF | 15 |
| REMOVE CONCRETE HEADERS | LF LB | 915 |
| DEFORMED STEEL BARS EDOXY COATED | | 2500 |
| DEFORMED STEEL BARS - EPOXY COATED | LB | |
| DRILLING HOLES AND GROUTING DOWELS | EA | 629 |
| REPAIR DEFECTIVE WELDS | LF | 199 |
| STRUCTURAL STEEL REPAIRS (SITE NO. 1) | CWT | |
| STRUCTURAL STEEL REPAIRS (SITE NO. 2) | CWT | 119 |
| STRUCTURAL STEEL REPAIRS (SITE NO. 3) | CWT | 104 |
| STRUCTURAL STEEL REPAIRS (SITE NO. 4) | CWT | 15 |
| STRUCTURAL STEEL REPAIRS (SITE NO. 5) | CWT | 12 |
| DISPOSAL OF LEAD DEBRIS FROM ABRASIVE BLAST CLEANING | TON | 10 |
| TEMPORARY SUPPORT ASSEMBLY | EA | U8U |
| ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 1) | LS | LS |
| ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 2) | LS | LS |
| ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 3) | LS | LS |
| ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 4) | LS | LS |
| ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 5) | LS | LS |
| CLASS 1 CONTAINMENT & COLLECTION OF SURFACE PREP. DEBRIS (SITE NO. 1) | LS | LS |
| CLASS 1 CONTAINMENT & COLLECTION OF SURFACE PREP. DEBRIS (SITE NO. 2) | LS | LS |
| CLASS 1 CONTAINMENT & COLLECTION OF SURFACE PREP. DEBRIS (SITE NO. 3) | LS | LS |
| CLASS 1 CONTAINMENT & COLLECTION OF SURFACE PREP. DEBRIS (SITE NO. 4) | LS | LS |
| CLASS 1 CONTAINMENT & COLLECTION OF SURFACE PREP. DEBRIS (SITE NO. 5) | LS | LS |
| LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL | SF | 400 |
| MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC) | SY | 15736 |
| REMOVAL OF EXISTING MASONRY | CY | 5 |
| CONCRETE HAUNCH REMOVAL | LF | 13760 |
| | | |
| | _ | |

TABLE OF BRIDGE QUANTITIES

| INSPECTION O | F FIELD | WELDS |
|-------------------|---------|------------------|
| METHODS | UNIT | QUANTITY |
| ULTRASONIC | INCH | ALL CJP WELDS |
| MAGNETIC PARTICLE | FEET | ALL FILLET WELDS |

| 2. AT BOLTED STEEL REPAIR LOCATIONS, EXISTING STEEL SHALL BE PRIMED AFTER CLEANING AND PRIOR TO | INSPECTION O | F FIELD | WELDS |
|---|-------------------|---------|------------------|
| INSTALLATION OF REPAIR STEEL. REPAIR PRIMER SHALL PROVIDE A CLASS 'B' SLIP COEFFICIENT. | METHODS | UNIT | QUANTITY |
| B. IN ADDITION TO BEAM ENDS AND COMPONENTS, CLEANING AND PAINTING OF ALL STEEL CAP BEAMS, AND | ULTRASONIC | INCH | ALL CJP WELDS |
| BRIDGE 03313 BEAM P7-1 IN ITS ENTIRETY, SHALL BE CONSIDERED WITHIN THE LIMITS OF THE ITEM "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)", AND SHALL BE PAID FOR | MAGNETIC PARTICLE | FEET | ALL FILLET WELDS |
| ADRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. A), AND SHALL BE PAID FOR | | | |

NOTICE TO BRIDGE INSPECTORS

THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING FOR COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE). THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION.

| - | - |
|---------------------|---------------------------|
| - | - |
| COMPONENT OR DETAIL | STRUCTURE SHEET REFERENCE |

6. THE COLOR OF THE TOP COAT ON THE STRUCTURAL STEEL SHALL CONFORM TO FEDERAL COLOR STANDARD 595, COLOR NO. TO BE DETERMINED BY THE ENGINEER. COLOR TO MATCH EXISTING AS CLOSELY AS POSSIBLE.

INCLUDED IN THE ITEM "CLASS 1 CONTAINMENT & COLLECTION OF SURFACE PREPARATION DEBRIS (SITE NO.

4. CLEANING AND PAINTING AT STEEL REPAIRS THAT ARE NOT WITHIN THE LIMITS OF "ABRASIVE BLAST

CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)" SHALL BE PAID FOR UNDER THE ITEM

5. CLASS 1 CONTAINMENT SHALL BE PROVIDED TO COLLECT AND CONTAIN DEBRIS RESULTING FROM THE

"LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL". SEE NOTES ON S-91 AND S-92.

REMOVAL OF COATINGS IN THE PREPARATION OF STEEL SURFACES FOR PAINTING, THIS WORK SHALL BE

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED |
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Filename: ...\S-04 GENERAL NOTES & QUANTITIES.dgn



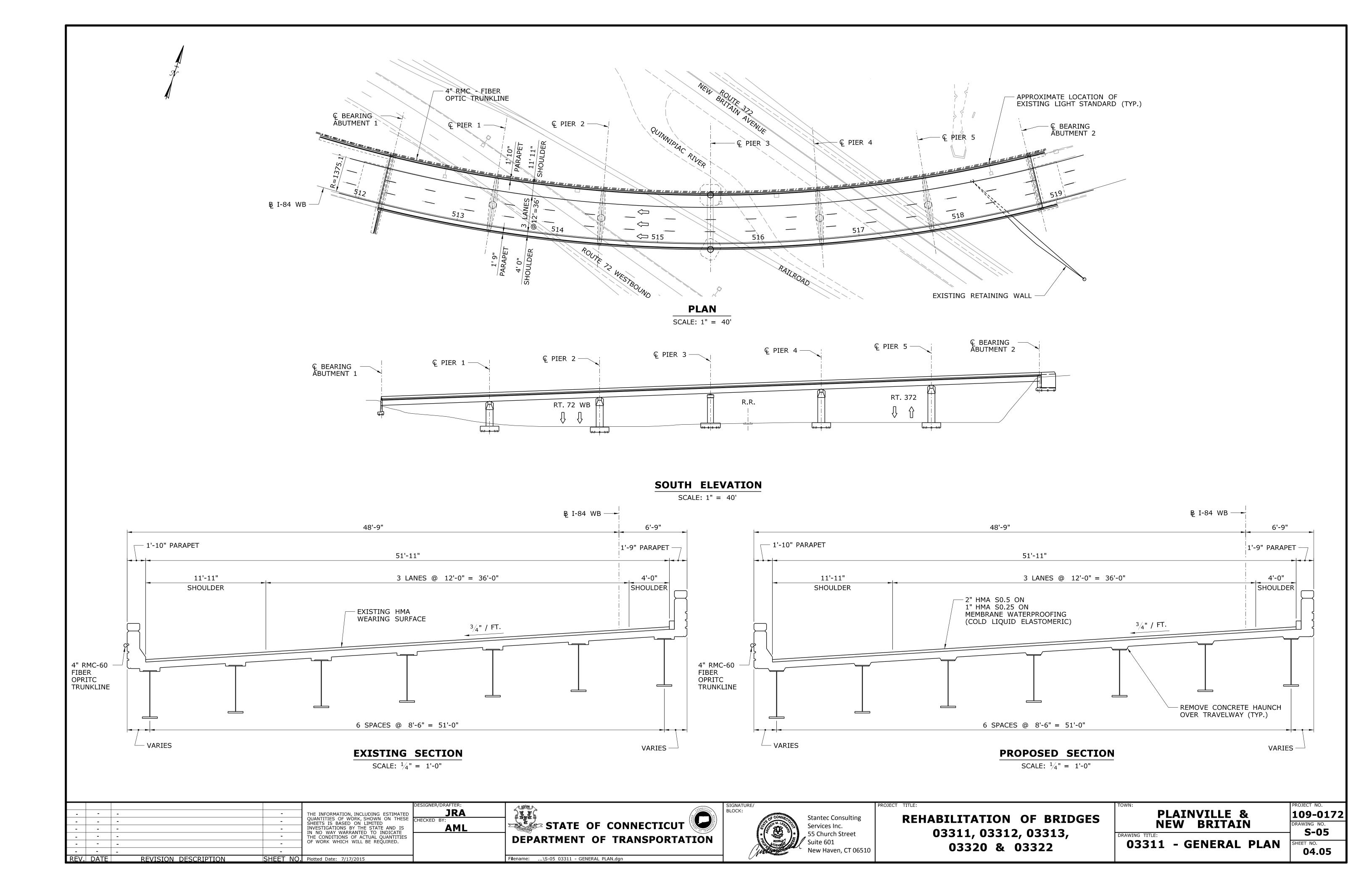
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

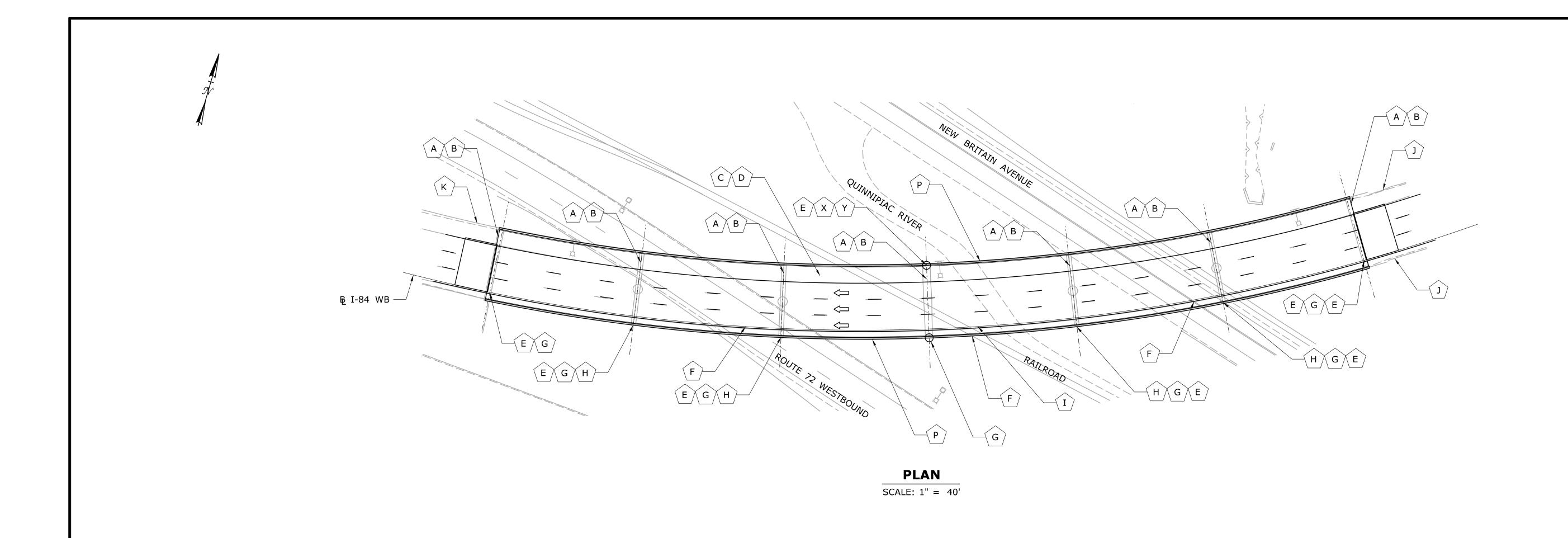
PLAINVILLE & **NEW BRITAIN** DRAWING TITLE:

109-0172 DRAWING NO. **S-04** HEET NO.

GENERAL NOTES & QUANTITIES

04.04





| | SCOPE OF WORK LEGEND |
|-------------|---|
| DESIGNATION | DESCRIPTION OF WORK |
| Α | REPLACE JOINTS AT ABUTMENTS AND PIERS |
| В | REPAIR DECK ENDS AT EACH JOINT AS REQUIRED |
| С | MILL DECK, FULL AND PARTIAL DEPTH DECK PATCH |
| D | PLACE NEW MEMBRANE WATERPROOFING AND BITUMINOUS OVERLAY OVER ENTIRE DECK |
| E | CLEAN AND PAINT BEAM ENDS, BEARING DEVICES, STEEL PIER CAP AND OTHER AREAS AS NEEDED |
| F | REMOVE HAUNCHES OVER ROADWAY AND RAILROAD |
| G | REPAIR SUBSTRUCTURE AS NECESSARY |
| Н | REPAIR POST-TENSIONING ANCHORAGE AT PIER CAPS; PROVIDE TEMPORARY SUPPORT OF PIER CAPS |
| I | REPAIR SUPERSTRUCTURE AS NECESSARY |
| J | REPLACE IMPACTED GUIDERAIL AT I-84 WESTBOUND APPROACHES |
| K | FILL IN UNDERMINED NW WINGWALL AND REPLACE MATERIAL OVER EXPOSED FOOTINGS |
| Р | REPAIR PARAPETS AS REQUIRED (FULL LENGTH) |
| X | REPLACE EXISTING BRIDGE PINS WITH NEW BRIDGE PINS |
| Υ | CLEAN AND PAINT STEEL PIER CAP |

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| - | - | • | - | THE INFORMATION, INCLUDING ESTIMATED | |
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| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE | |
| ı | - | 1 | - | THE CONDITIONS OF ACTUAL QUANTITIES | |
| - | - | • | - | OF WORK WHICH WILL BE REQUIRED. | |
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SHEET NO. Plotted Date: 7/17/2015

REVISION DESCRIPTION

REV. DATE

AML

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

Filename: ...\S-06 03311 - SCOPE OF WORK.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313

03320 & 03322

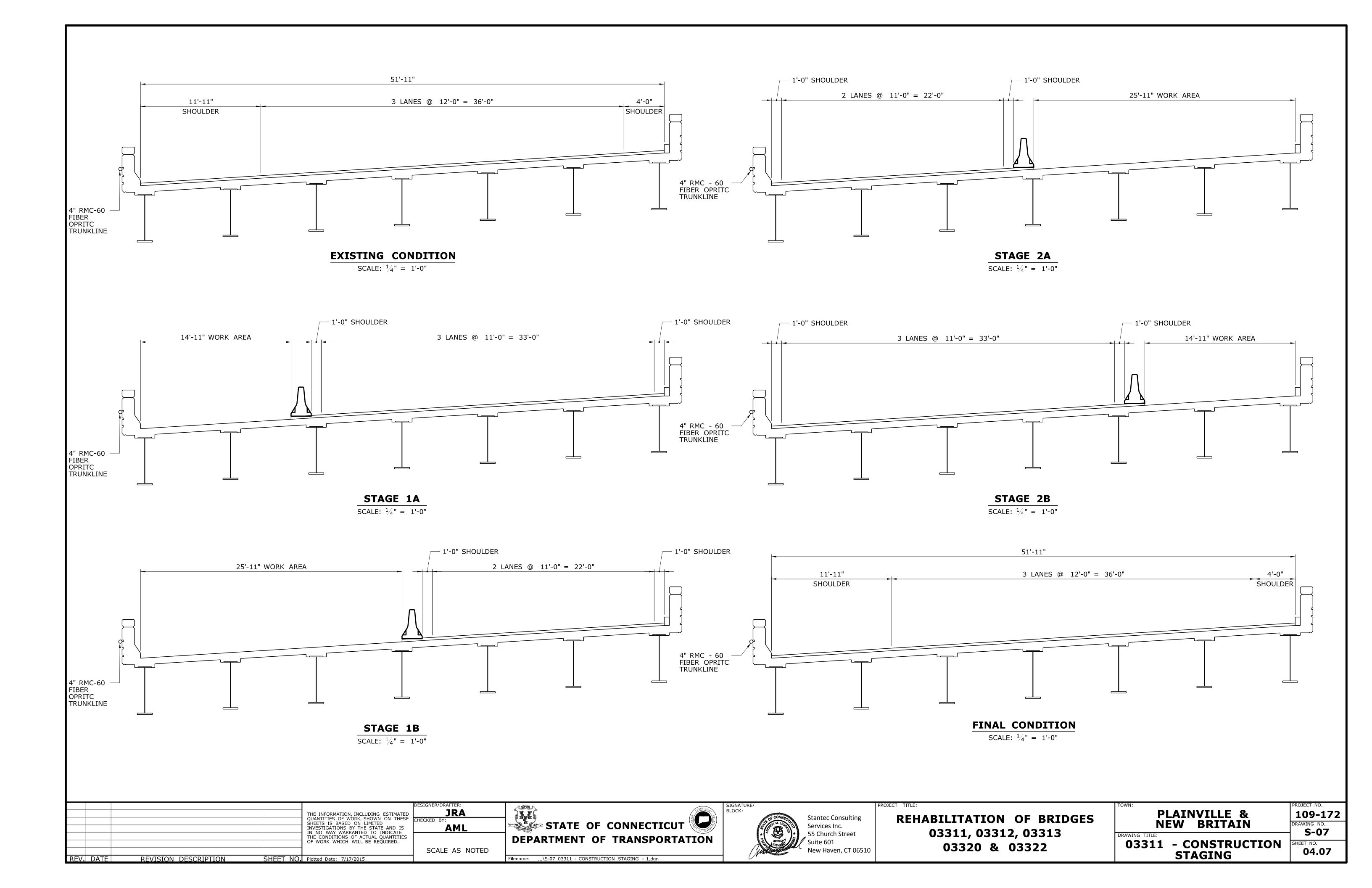
PLAINVILLE & NEW BRITAIN O3311 - SCOPE OF WORK

SHEET NO.

04.06

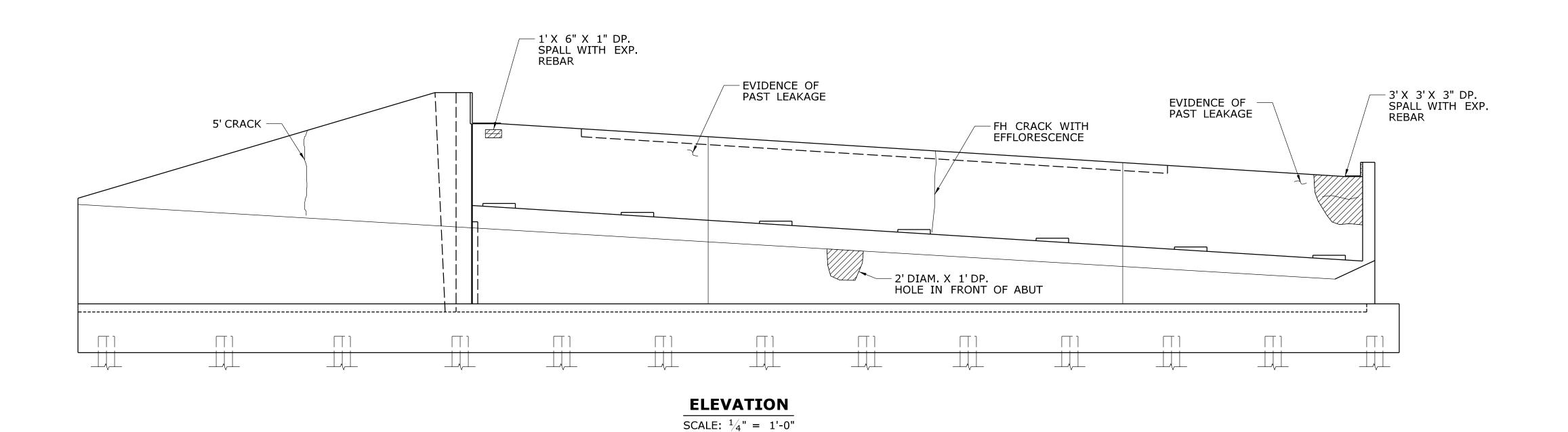
109-0172 DRAWING NO.

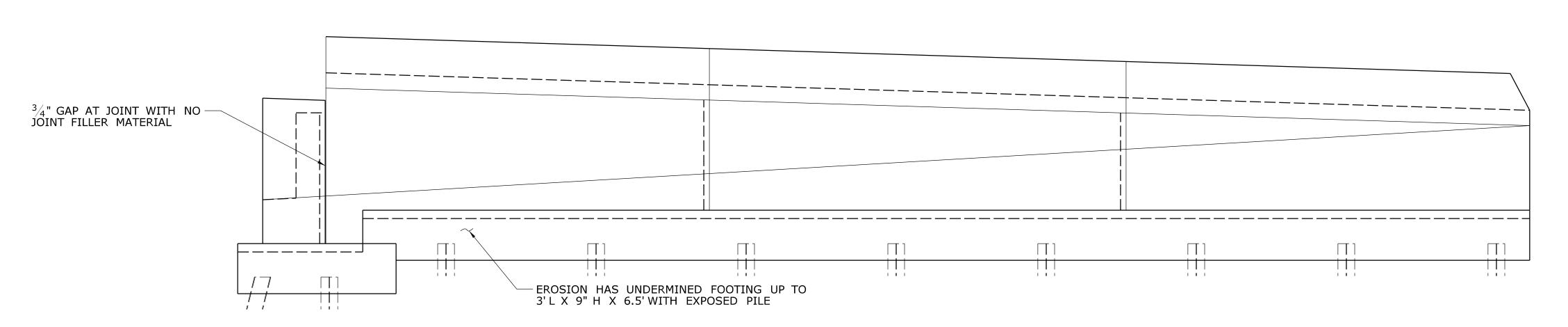
S-06



1. CONCRETE REPAIR DETAILS

S-83





WINGWALL 1A - ELEVATION SCALE: $\frac{1}{4}$ " = 1'-0"

NOTES

1. SEE SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND



SPALL

HOLLOW CONCRETE

| | | | | I I |
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| - | - | - | _ | THE INFORMATION, INCLUDING ESTIMATED |
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| REV. | DATE | REVISION DESCRIPTION | SHEET N | O. Plotted Date: 7/17/2015 |





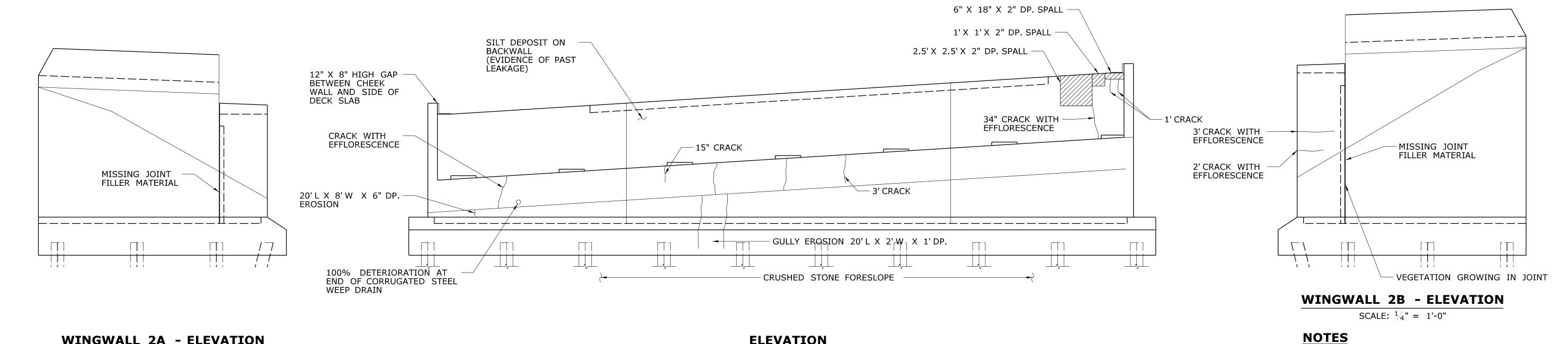
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | |
|------------------|--|
| PLAINVI NEW B | |
| DRAWING TITLE: | |

S-08 03311 - ABUTMENT 1 PLAN & ELEVATION 04.08

109-0172

REFERENCE SHEET 1. CONCRETE REPAIR DETAILS S-83



WINGWALL 2A - ELEVATION SCALE: $\frac{1}{4}$ " = 1'-0"

ELEVATION SCALE: $\frac{1}{4}$ " = 1'-0"

1. SEE SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

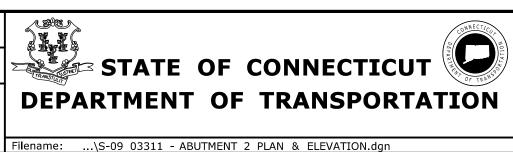
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HOLLOW CONCRETE

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| - | - | - | - | IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
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| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/17/2015 |

| | DESIGNER/DRAFTER: |
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| E | CHECKED BY: |
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REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

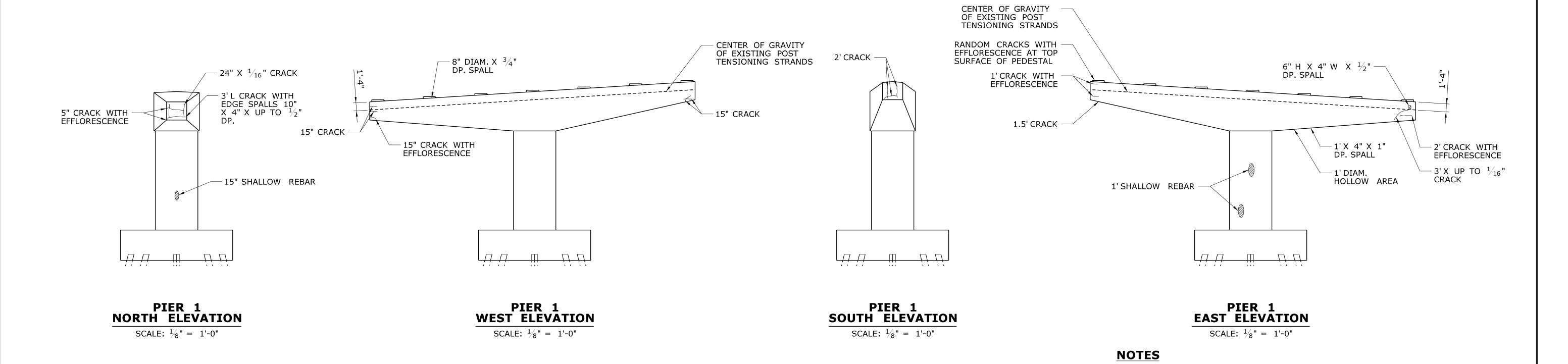
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| TOWN: | | |
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| DRAWING | TITLE: | |

109-0172 DRAWING NO.

S-09 03311 - ABUTMENT 2 PLAN & ELEVATION SHEET NO. **04.09**

S-83

1. CONCRETE REPAIR DETAILS



CONCRETE DETERIORATION LEGEND

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HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

REV. DATE

REVISION DESCRIPTION

SHEET NO. Plotted Date: 7/17/2015

DESIGNER/DRAFTER:

JRA

CHECKED BY:

AML

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

Filename: ...\S-10 03311 - CONCRETE PIER PLAN AND ELEVATION - 1.dgn



PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | AIN EW | VILL BRIT | |
|---------|--------|-----------|--------------|--|
| DRAWING | TITLE: | | | |

CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO

CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE

SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT

NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED

IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED.

PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.

EXCEED $\frac{3}{4}$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.

3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

O3311 - PIER 1
PLAN & ELEVATION

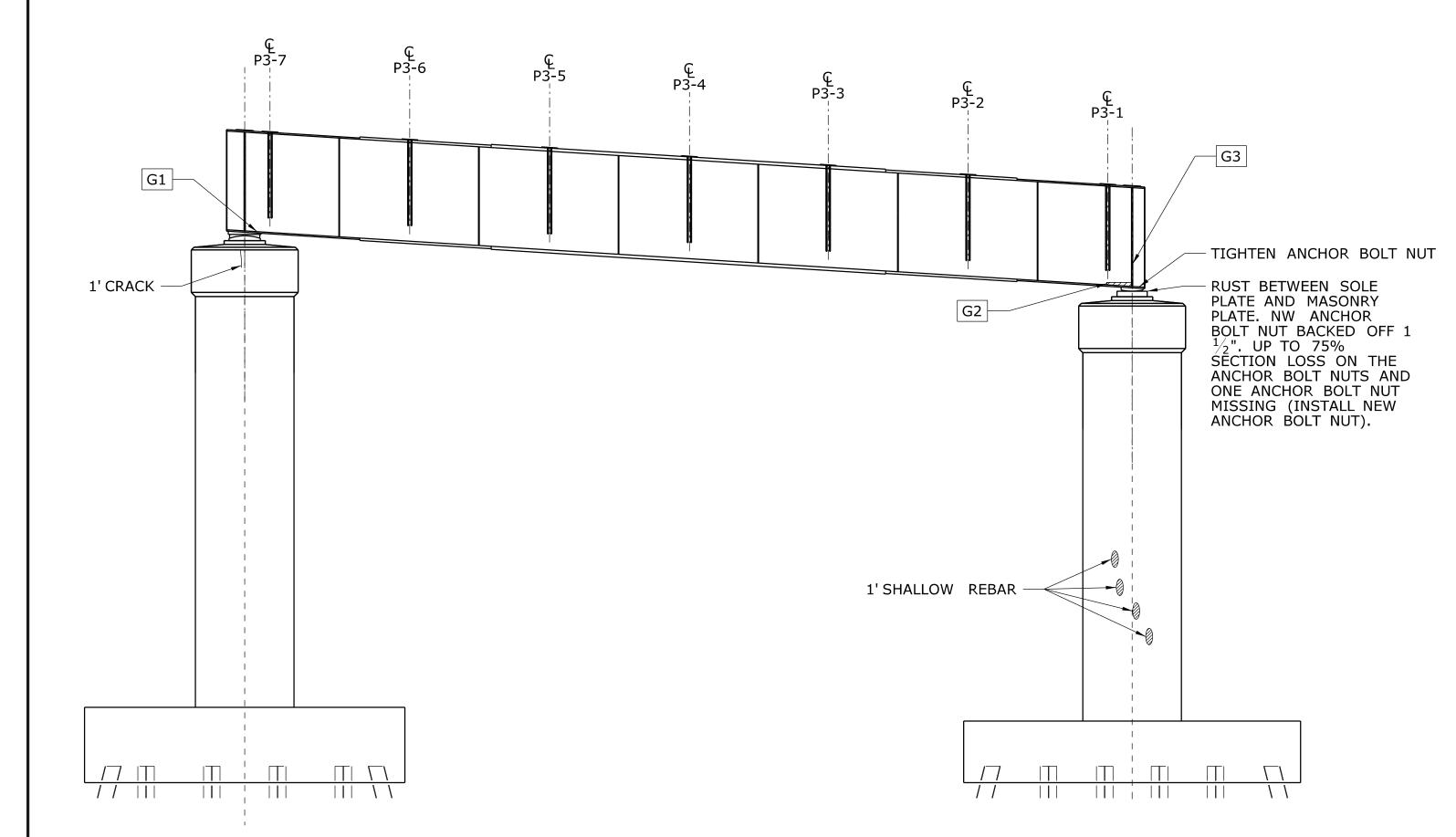
S-10
SHEET NO.
04.10

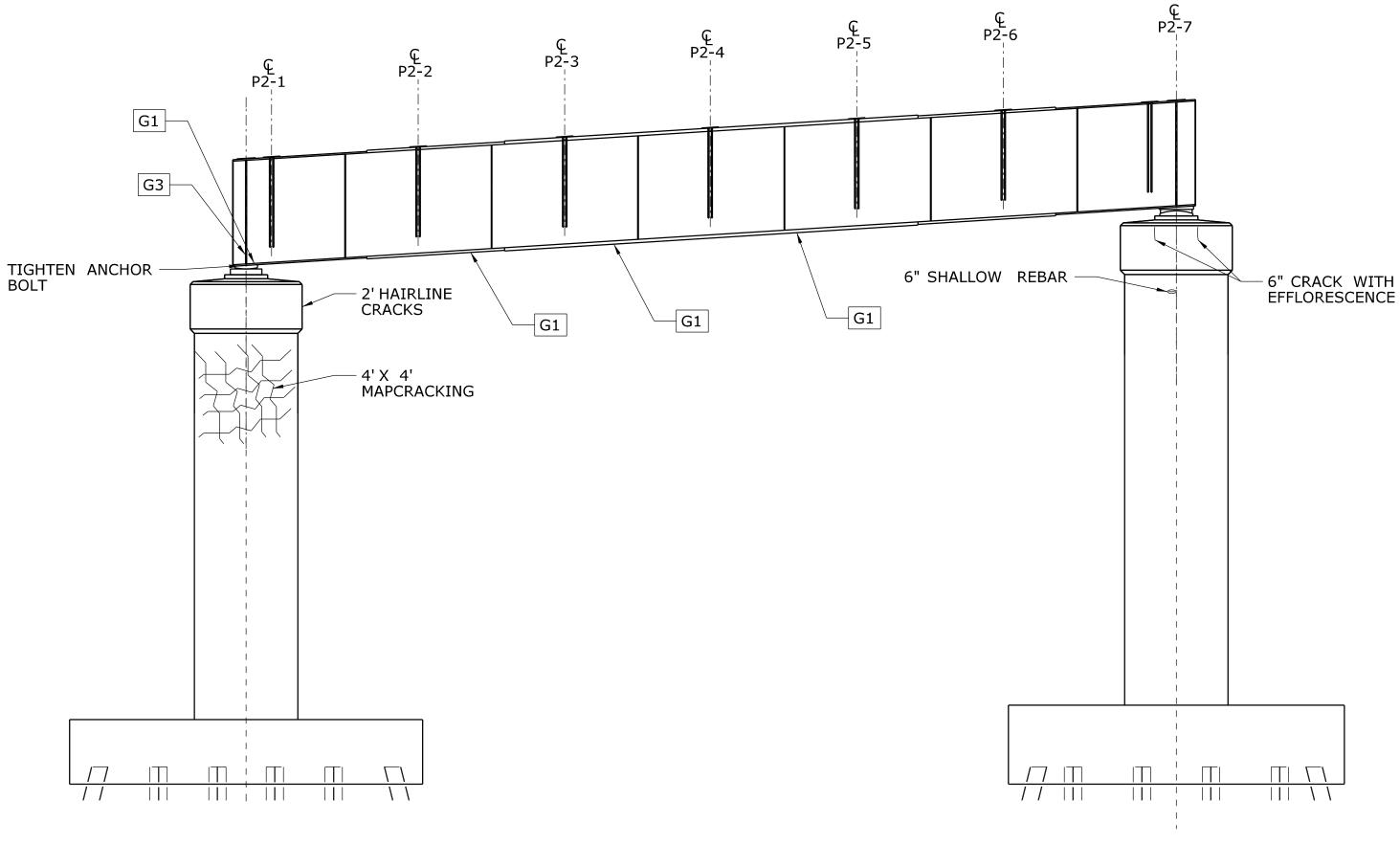
109-0172

REFERENCE SHEET 1. CONCRETE REPAIR DETAILS S-83 - CENTER OF GRAVITY OF EXISTING POST CENTER OF GRAVITY TENSIONING STRANDS OF EXISTING POST -1'CRACK WITH EFFLORESCENCE TENSIONING STRANDS 18" CRACK 2' CRACK WITH 2' CRACK EXTENDS ONTO 6" X 4" X 1" DP. SPALL **EFFLORESCENCE** UNDERSIDE AND OPENS - 1' X 1' MAPCRACKING 3' CRACK WITH UP TO $\frac{1}{16}$ " WIDE **EFFLORESCENCE** 12" X 3" X 1" DP. SPALL - 2' CRACK 1' X 1.5' HOLLOW AREA - 1' CRACK WITH OVER RIGHT EFFLORESCENCE — 15" CRACK WITH LANE OF RT. 72 **EFFLORESCENCE** - 2' CRACK WITH **EFFLORESCENCE** CRACK WITH **EFFLORESCENCE** PIER 2 PIER 2 PIER 2 PIER 2 NORTH ELEVATION **EAST ELEVATION SOUTH ELEVATION WEST ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0" **NOTES** 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR. 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. CONCRETE DETERIORATION LEGEND SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM. CRACK 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04. SPALL HOLLOW CONCRETE STATE OF CONNECTICUT JRA THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. PLAINVILLE & 109-0172 REHABILITATION OF BRIDGES Stantec Consulting **NEW BRITAIN** - | - | -DRAWING NO. **AML** Services Inc. - | - | -03311, 03312, 03313 S-11 55 Church Street DRAWING TITLE: _ | - | -**DEPARTMENT OF TRANSPORTATION** Suite 601 03311 - PIER 2 - - -03320 & 03322 New Haven, CT 06510 04.11 - | - | -**PLAN & ELEVATION** REV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: 7/17/2015 Filename: ...\S-11 03311 - CONCRETE PIER PLAN AND ELEVATION - 2.dgn









PIER 3
EAST ELEVATION SCALE: $\frac{3}{16}$ " = 1'-0"

PIER 3 WEST ELEVATION SCALE: $\frac{3}{16}$ " = 1'-0"

NOTES

1. SEE ADDITIONAL SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

HOLLOW CONCRETE

| TYPE | STEEL REPAIR | REF. |
|------|-----------------------------|------|
| G1 | GIRDER BOTTOM FLANGE REPAIR | S-91 |
| G2 | GIRDER WEB REPAIR | S-92 |
| G3 | GIRDER STIFFENER REPAIR | S-92 |

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED |
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| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | _ | OF WORK WHICH WILL BE REQUIRED. |
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SHEET NO. Plotted Date: 7/17/2015

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| ML | STATE OF CONNECTICUT | |
| | DEPARTMENT OF TRANSPORTATION | |
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Filename: ...\S-12 03311 - CONCRETE PIER PLAN AND ELEVATION - 3.dgn



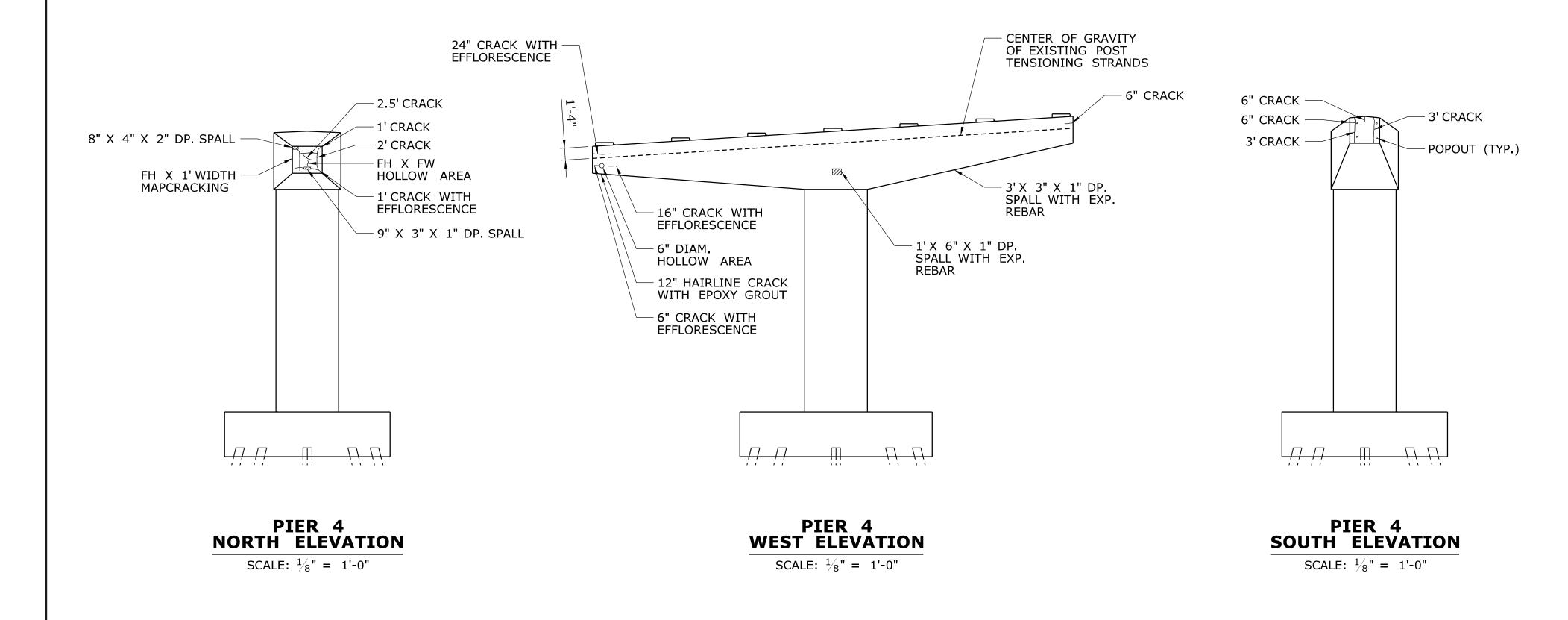
| REHABILITATION OF | BRIDGES | | | |
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| 03311, 03312, 03313 | | | | |
| 03320 & 033 | 322 | | | |

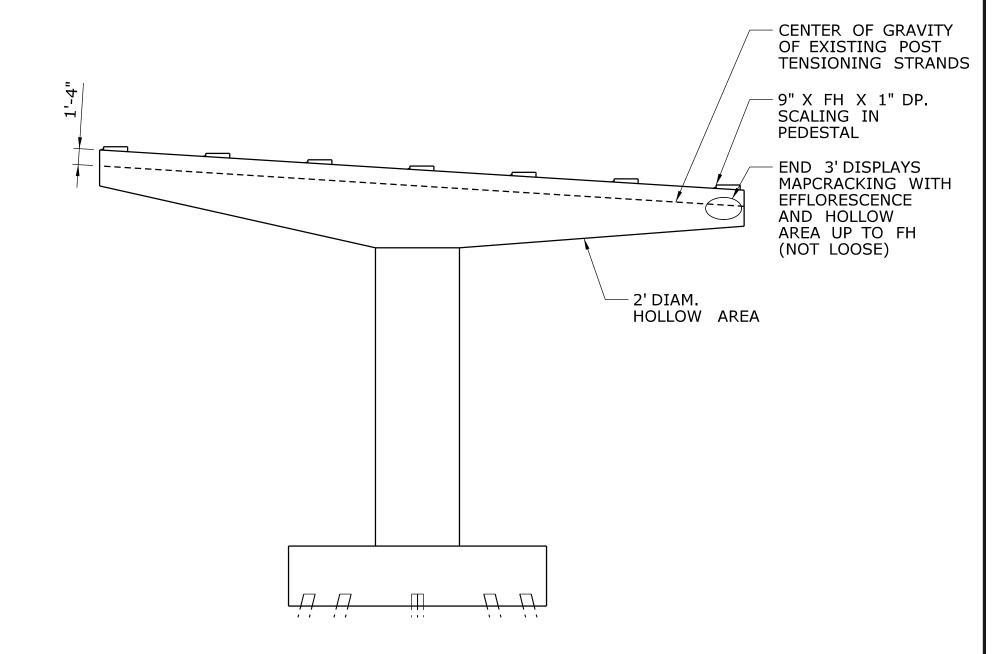
| TOWN: | | VILLE & BRITAIN | |
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| PLAINVILLE & NEW BRITAIN | 109-0172 DRAWING NO. |
|------------------------------------|----------------------|
| VING TITLE: | S-12 |
| 03311 - PIER 3 PLAN & ELEVATION | 04.12 |

S-83

1. CONCRETE REPAIR DETAILS





PIER 4 EAST ELEVATION SCALE: \frac{1}{8}" = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $\frac{3}{4}$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED |
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| _ | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
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| _ | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
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SHEET NO. Plotted Date: 7/17/2015

DESIGNER/DRAFTER:

JRA

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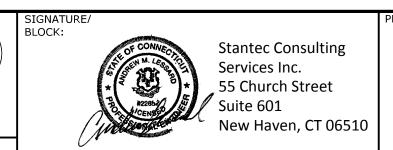
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STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-13 03311 - CONCRETE PIER PLAN AND ELEVATION - 4.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

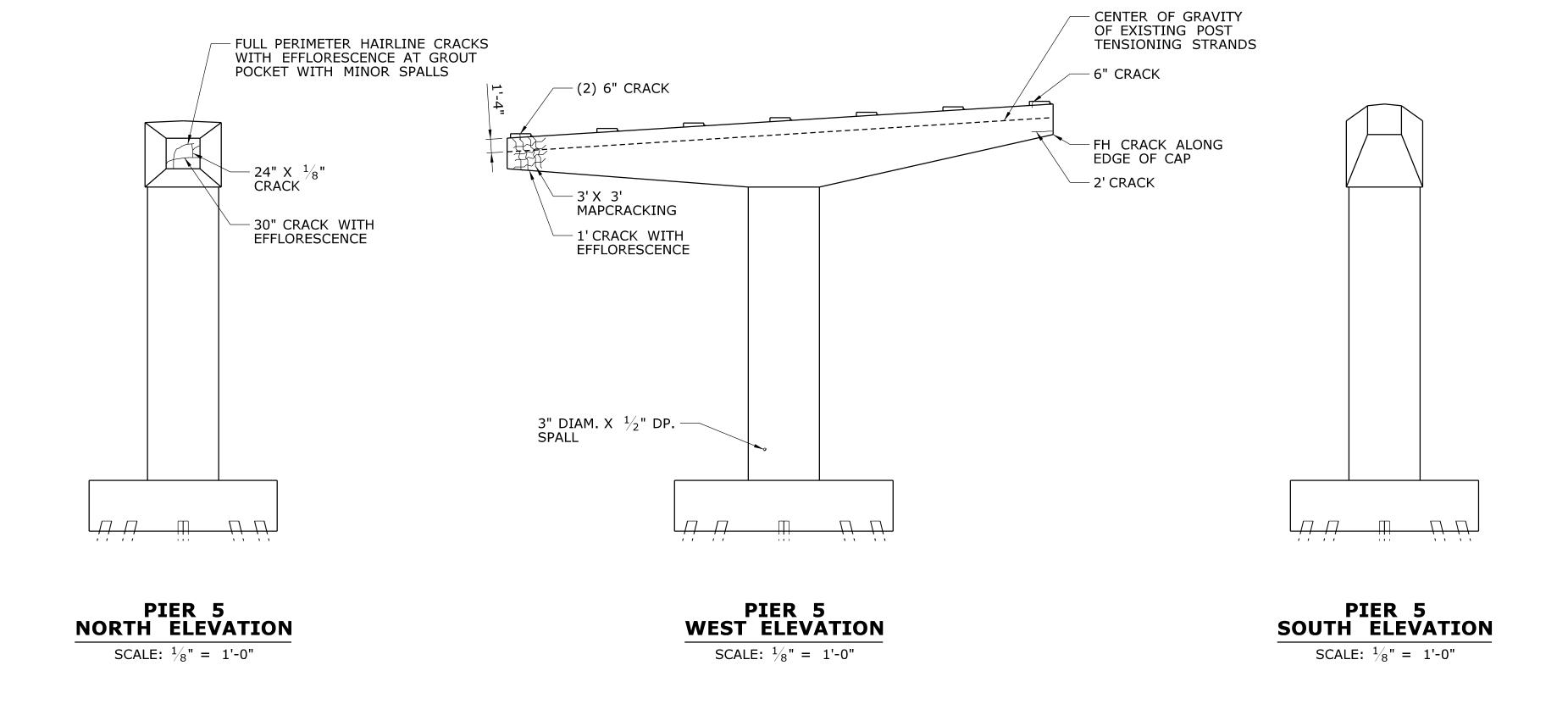
| PLAINVILLE & NEW BRITAIN |
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| DRAWING TITLE: |
| 03311 - PIER 4 |

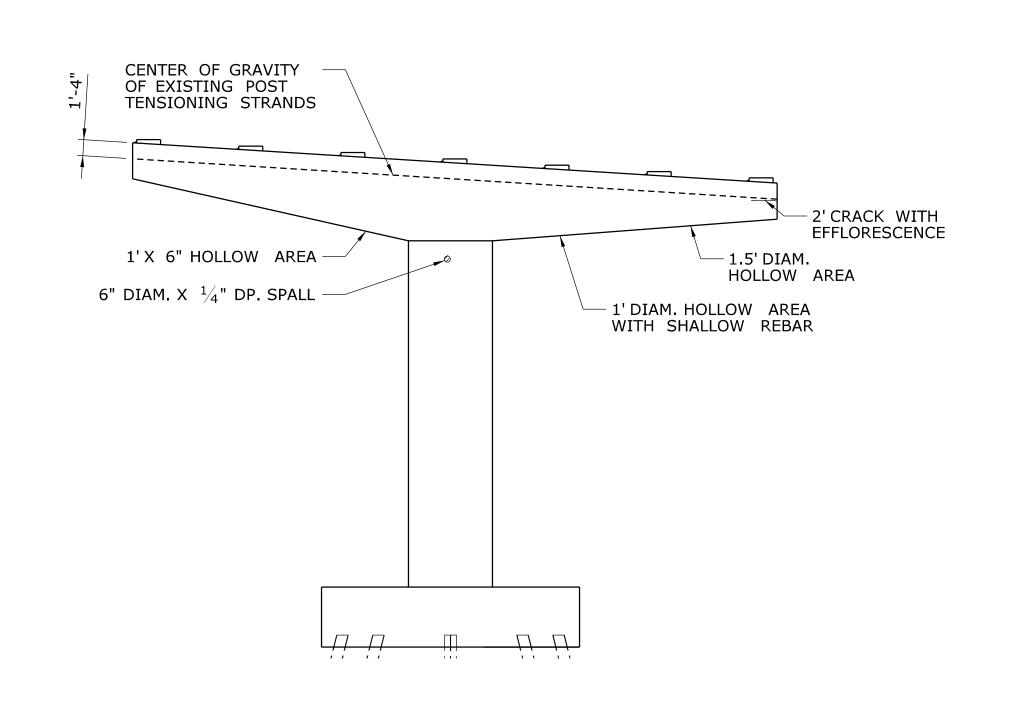
PLAN & ELEVATION

109-0172
DRAWING NO.
S-13
SHEET NO.
04.13

S-83







PIER 5 **EAST ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

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SHEET NO. Plotted Date: 7/17/2015

JRA **AML**

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-14 03311 - CONCRETE PIER PLAN AND ELEVATION - 5.dgn



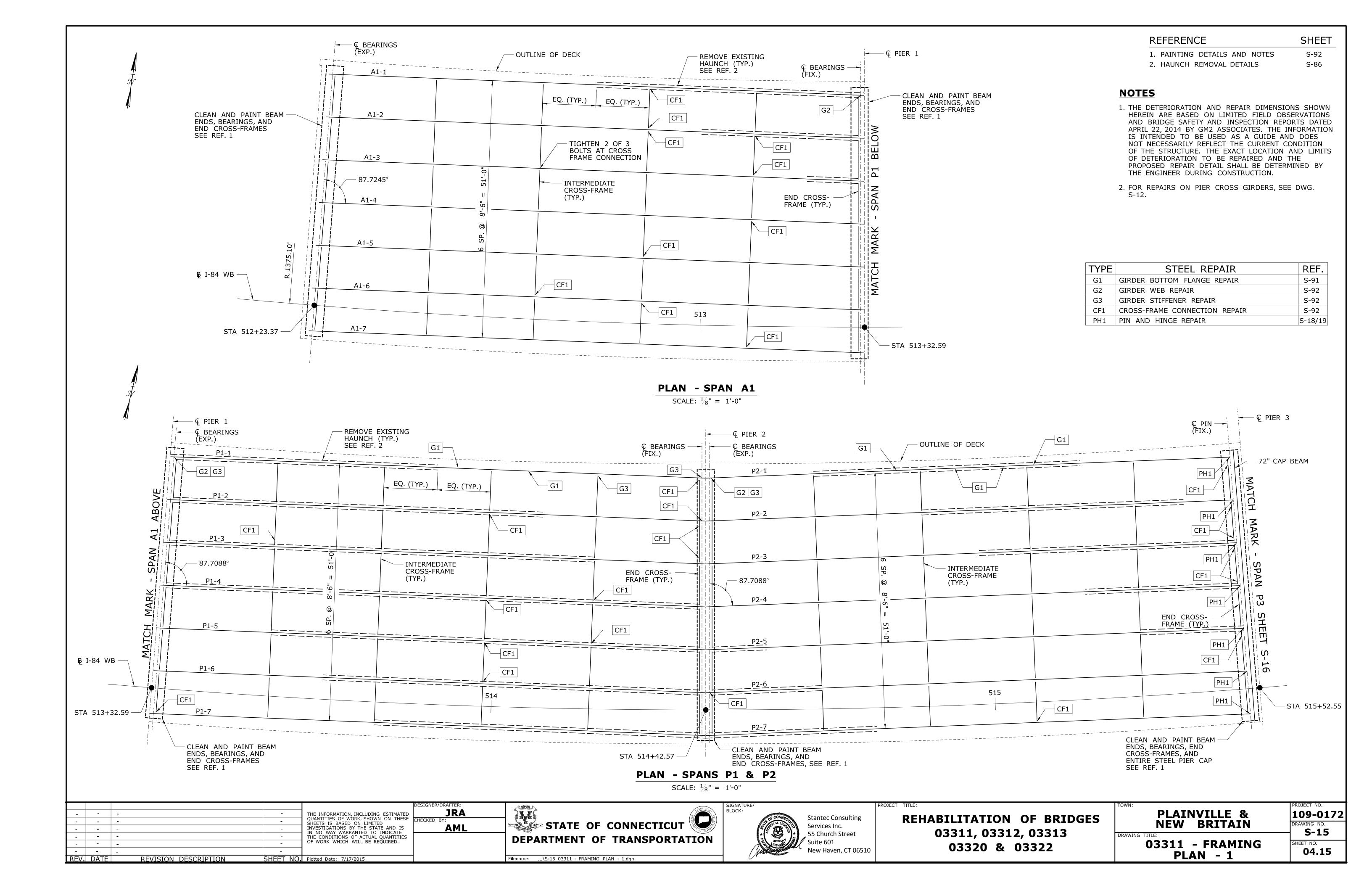
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

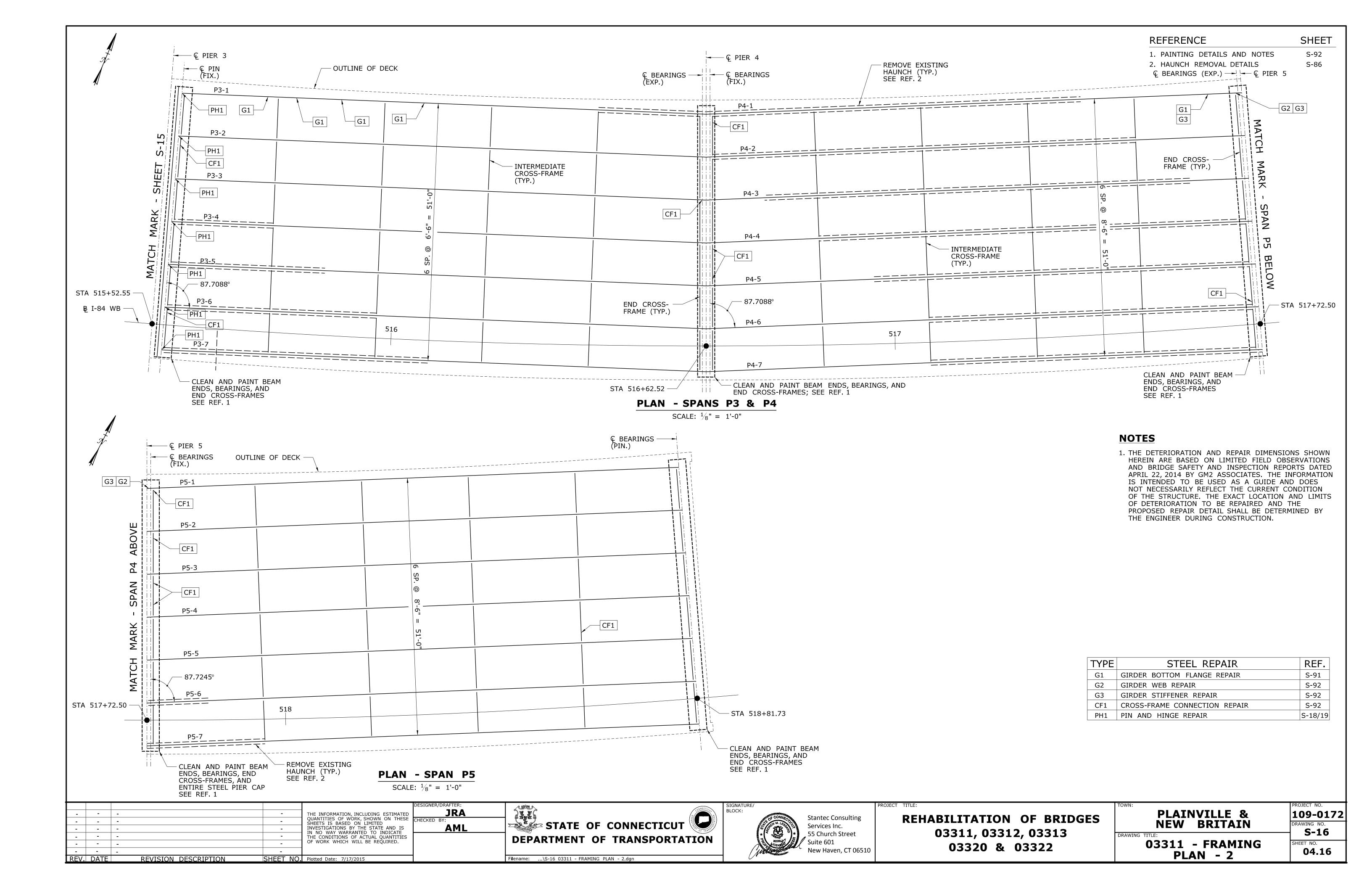
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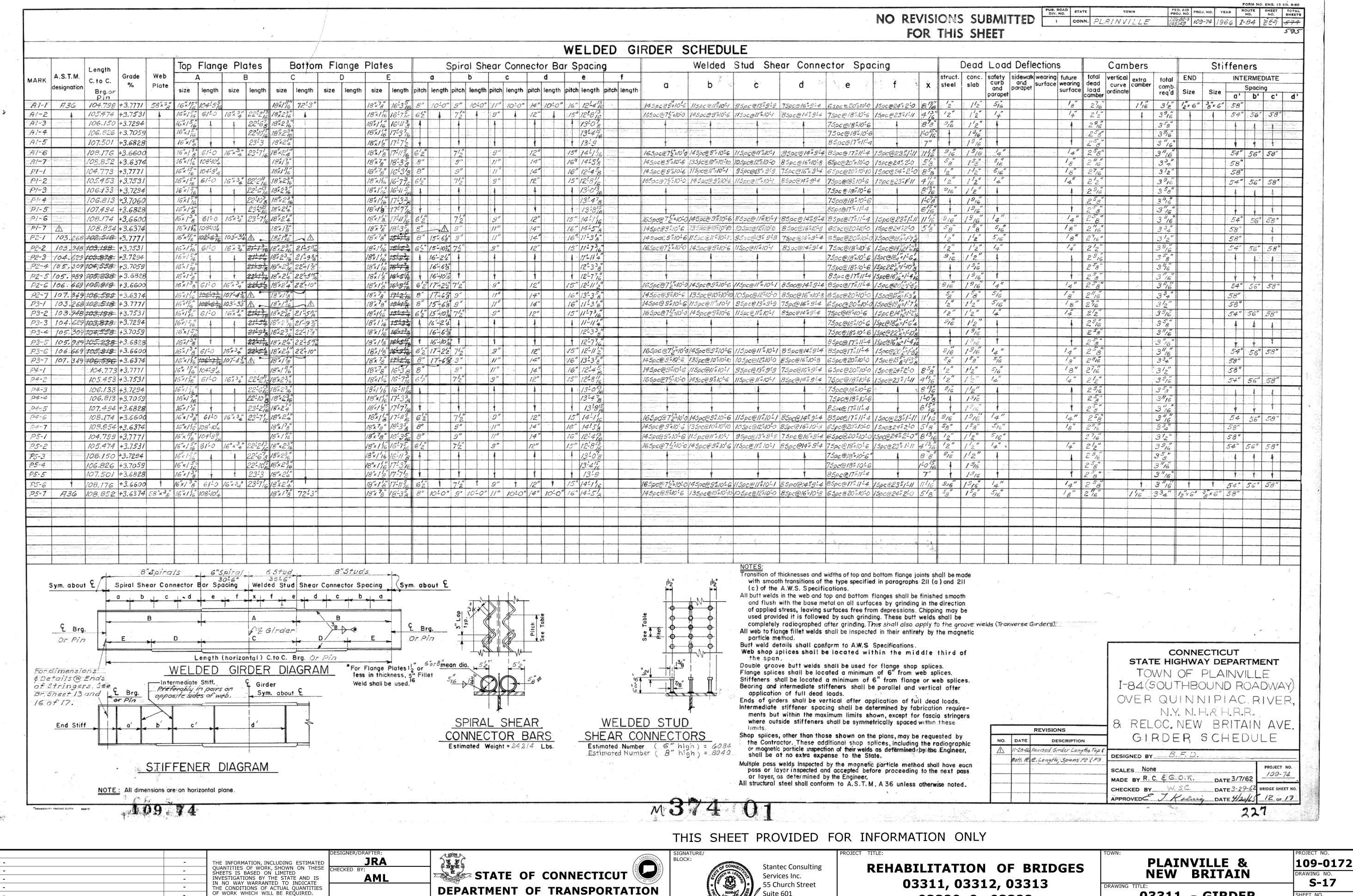
109-0172 DRAWING NO. **S-14**

04.14

03311 - PIER 5 PLAN & ELEVATION







Filename: ...\S-17 03311 - GIRDER SCHEDULE.dgn

REV. DATE

REVISION DESCRIPTION

SHEET NO. Plotted Date: 7/17/2015

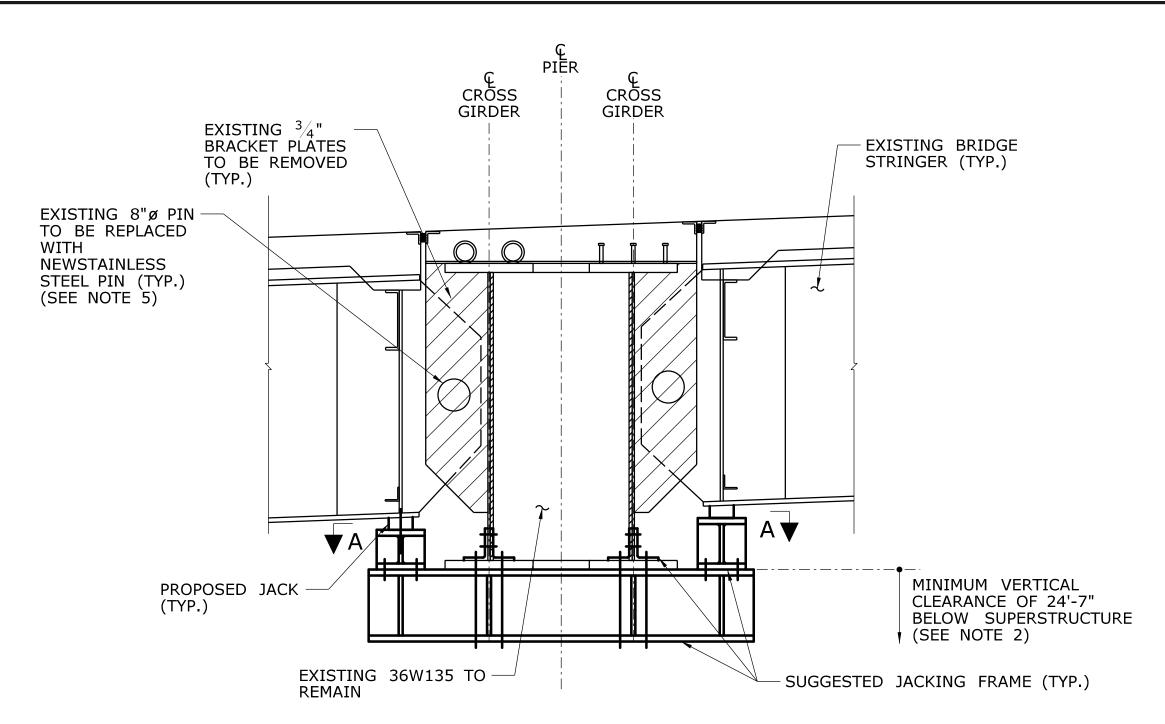
03311 - GIRDER

03320 & 03322

New Haven, CT 06510

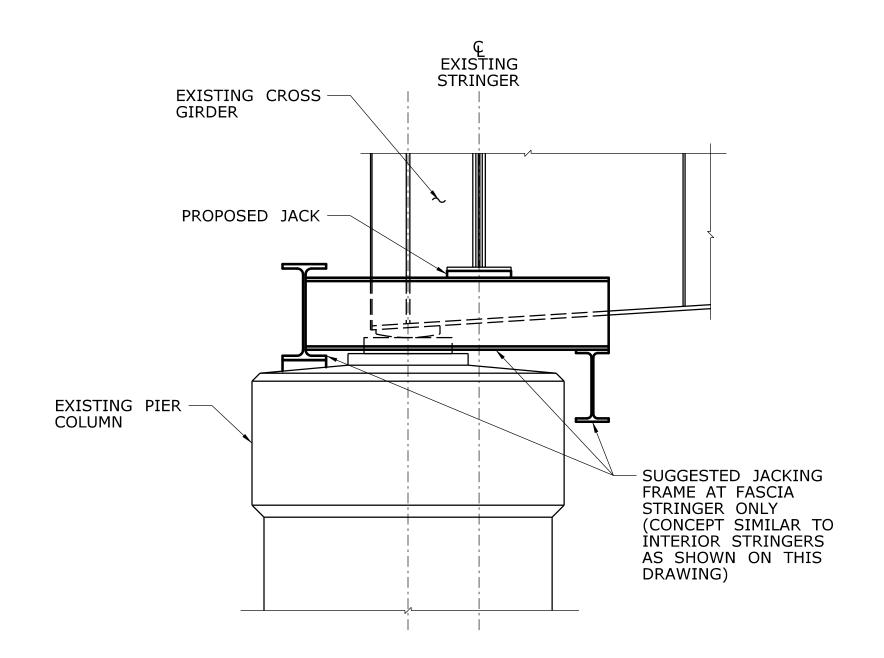
SCHEDULE

04.17



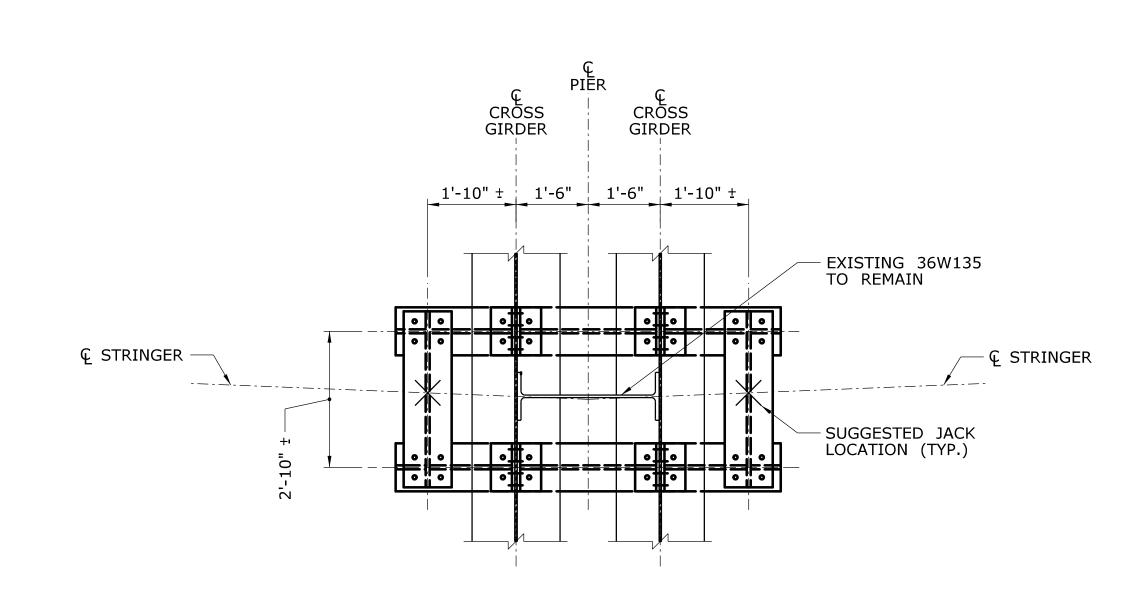
REMOVAL SECTION AND SUGGESTED JACKING ASSEMBLY AT INTERIOR STRINGERS

SCALE: $\frac{1}{2}$ " = 1'-0"

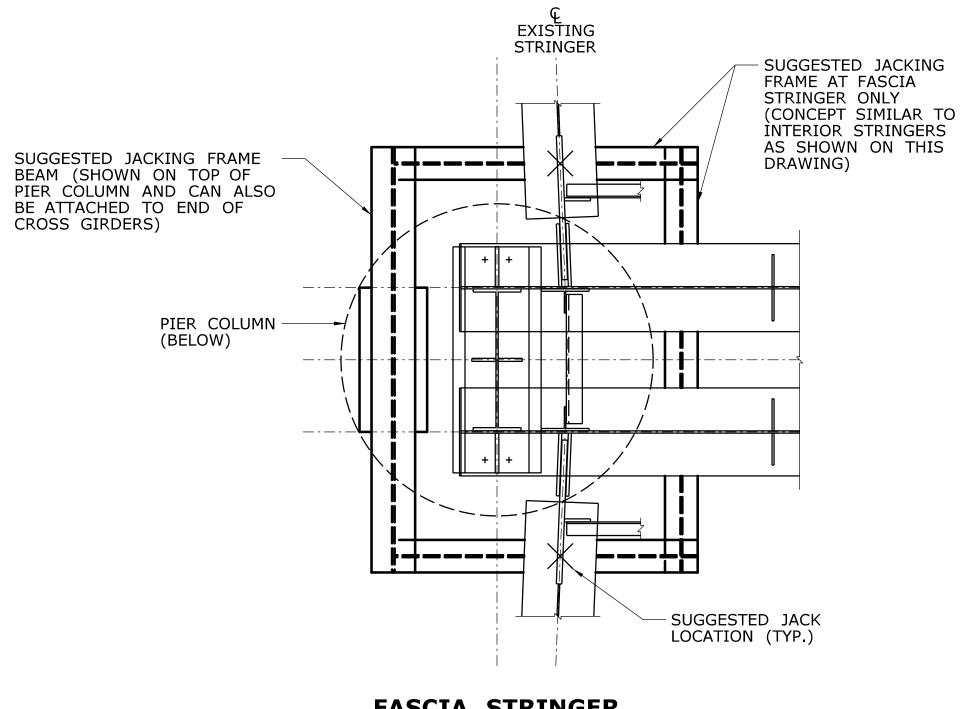


SUGGESTED FASCIA JACKING **ASSEMBLY ELEVATION VIEW**

SCALE: $\frac{1}{2}$ " = 1'-0"



SECTION A-A SCALE: $\frac{1}{2}$ " = 1'-0"



FASCIA STRINGER JACKING PLAN

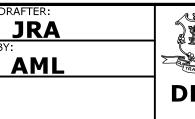
SCALE: $\frac{1}{2}$ " = 1'-0"

NOTES

- 1. THE JACKING ASSEMBLY AS SHOWN ON THIS DRAWING IS SUGGESTED. CONTRACTOR SHALL PROVIDE THE DESIGN FOR THE JACKING SYSTEM USED. DRAWINGS AND CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT SHALL BE SUBMITTED FOR APPROVAL.
- PER THE INSPECTION REPORT BY GM2 ASSOCIATES, INC. DATED APRIL 22, 2014, THE MINIMUM VERTICAL CLEARANCE AT PIER 1 BELOW THE SUPERSTRUCTURE IS 24'-7". THE MINIMUM VERTICAL CLEARANCE ALLOWED BELOW THE SUGGESTED JACKING FRAME IS 16'-0". THE CONTRACTOR SHALL VERIFY THAT THIS MINIMUM VERTICAL CLEARANCE CAN BE MET PRIOR TO FABRICATION OF THE JACKING SYSTEM OR THAT THE FRAME CAN BE INSTALLED WITH LANE CLOSURES.
- 3. JACKING OF GIRDERS FOR PURPOSE OF REPLACING PINS AND BRACKET PLATES SHALL BE PAID FOR UNDER THE ITEM "TEMPORARY SUPPORT ASSEMBLY".
- JACKING FRAME USED FOR REPLACING BRIDGE PINS AND BRACKET PLATES SHALL BE PAID FOR UNDER THE ITEM "TEMPORARY SUPPORT ASSEMBLY".
- 5. PROPOSED PIN SHALL BE STAINLESS STEEL AND HAVE A MINIMUM Fy=50 KSI.

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED |
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| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
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| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
| - | - | - | - | |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/17/2015 |

REV. DATE





Filename: ...\S-18 03311 - PIN REPLACEMENT DETAILS.dgn



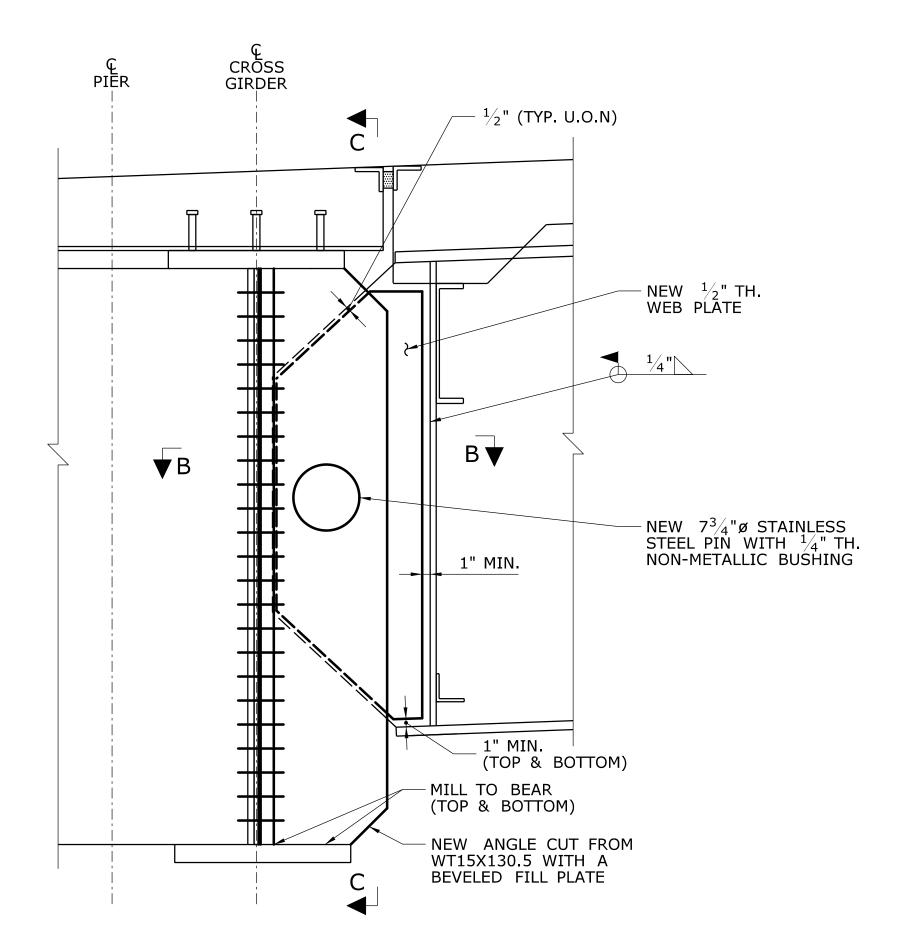
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | NVILLE BRITA | |
|-------|---------------------|--|
| | | |

DRAWING NO. S-18 04.18

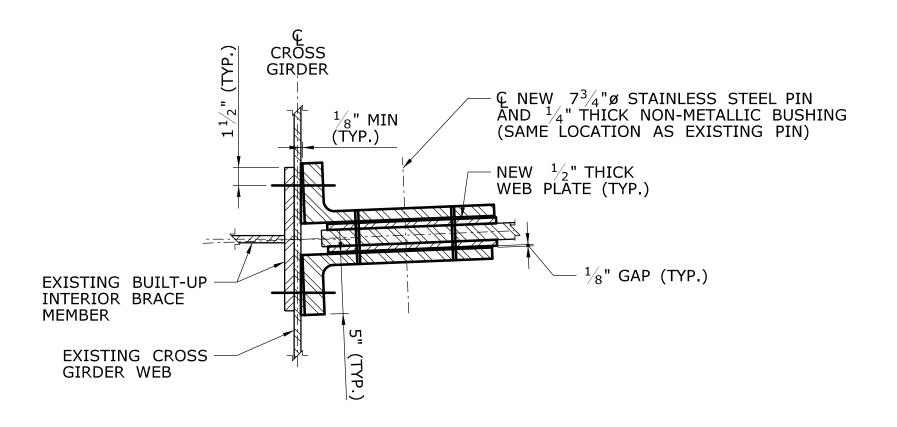
109-0172

03311 - PIN REPLACEMENT DETAILS

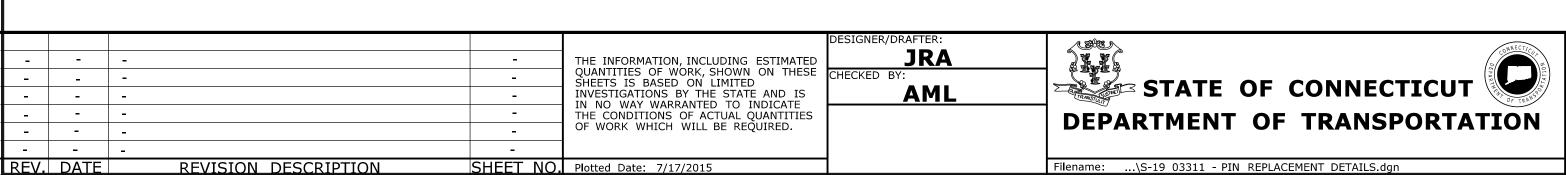


PROPOSED PIN REPLACEMENT DETAIL (BRIDGE 03311 & 03312) BRIDGE 03311 SHOWN, 03312 SIMILAR

SCALE: 1" = 1'-0"



SECTION B-B SCALE: $1\frac{1}{2}$ " = 1'-0"





REHABILITATION OF BRIDGES 03311, 03312, 03313

03320 & 03322

PLAINVILLE & NEW BRITAIN DRAWING TITLE:

DRAWING NO. S-19 03311 - PIN 04.19 REPLACEMENT DETAILS

109-0172

SECTION C-C

SCALE: 1" = 1'-0"

NOTES

5'-6" (BRIDGE 03311) = 6'-9" (BRIDGE 03312)

22 SPA. @ 24 SPA. @ 3

1. PROPOSED PIN SHALL BE STAINLESS STEEL AND HAVE A MINIMUM Fy=50 KSI.

LOCATION OF POSSIBLE EXISTING PLUG WELD (TYP.)

- Ç EXISTING AND NEW

NEW ANGLE CUT FROM A WT

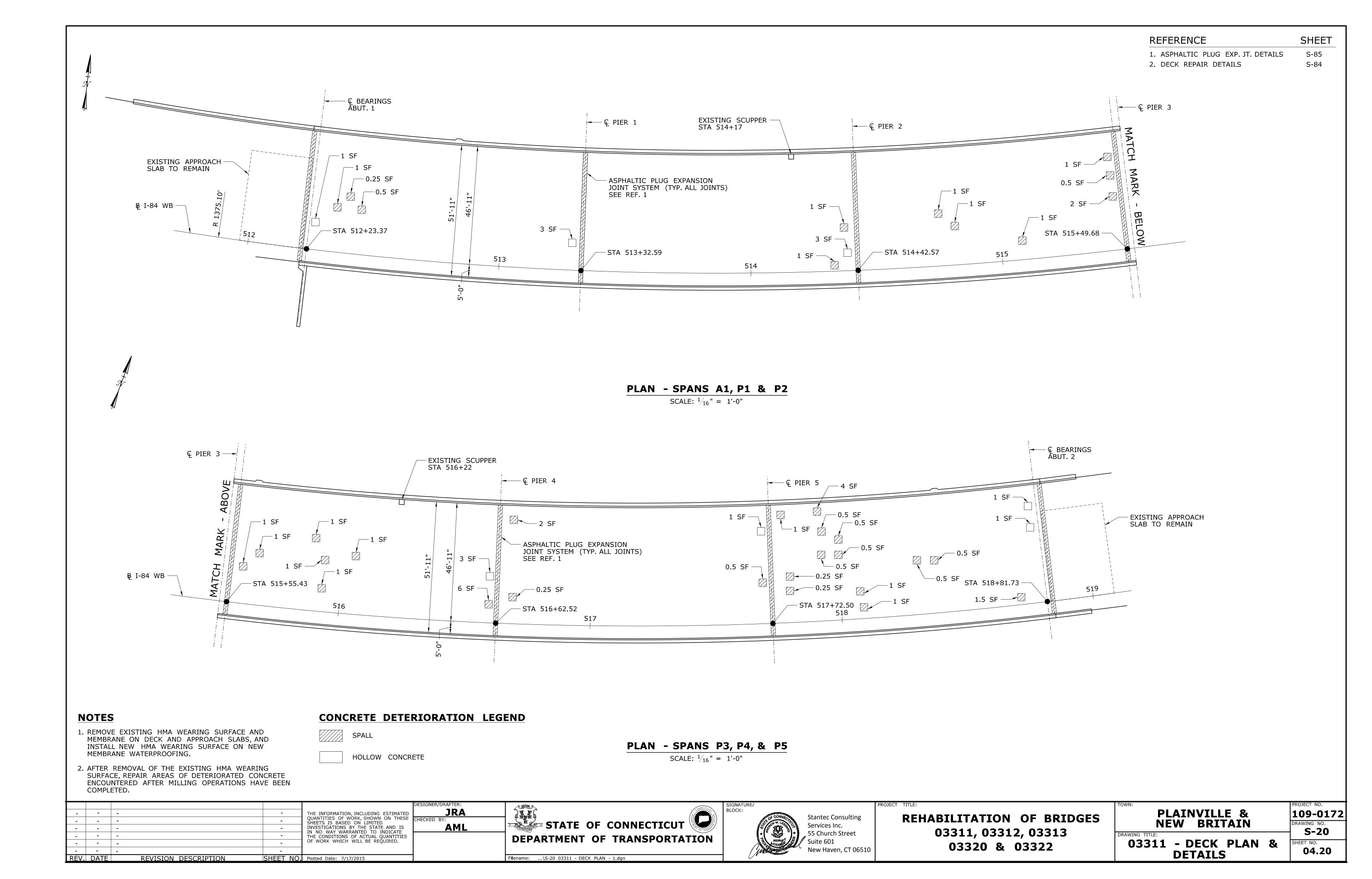
CUT LEG TO BE 5" WIDE (TYP.)

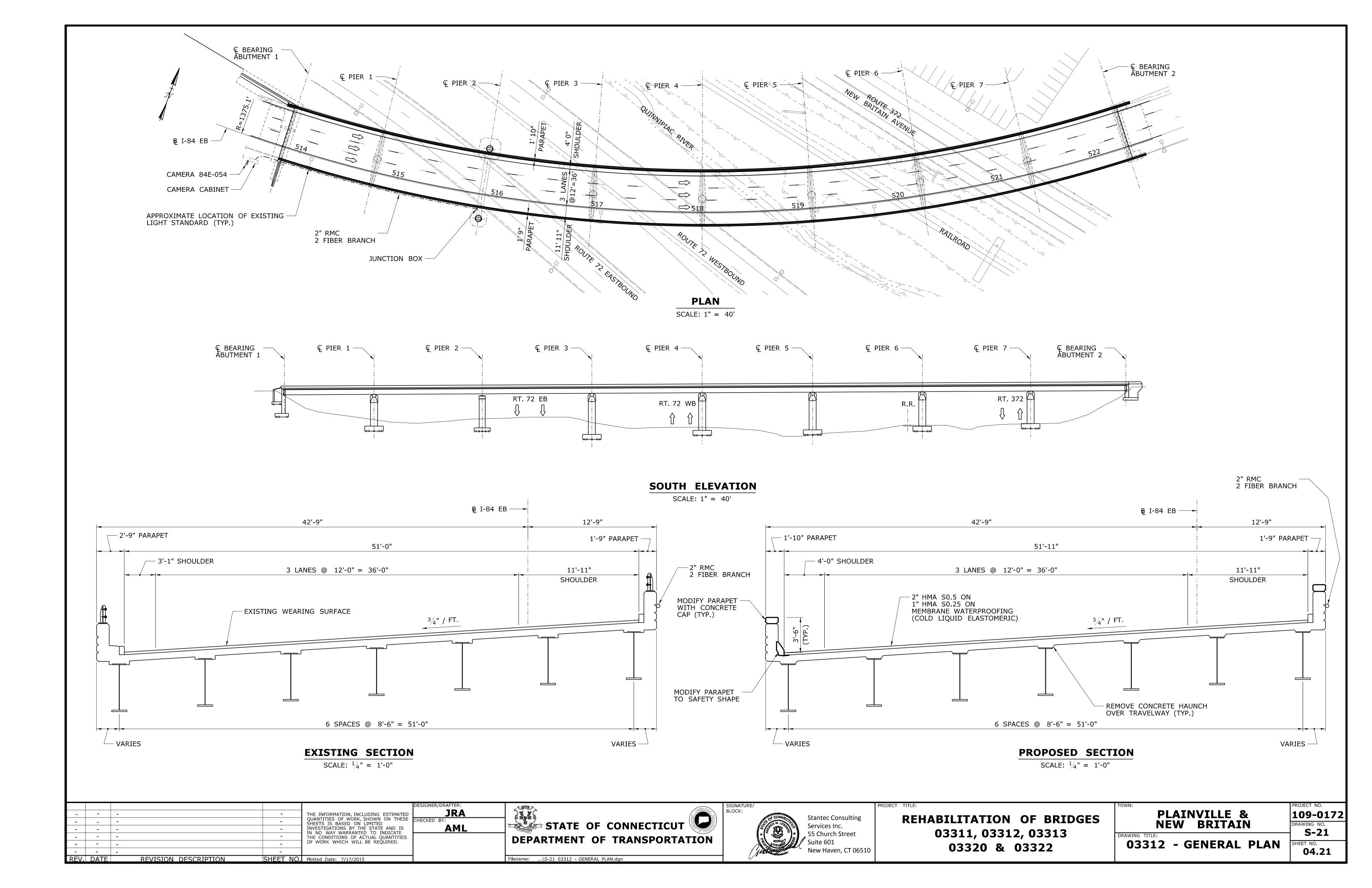
EXISTING INTERIOR
BRACE MEMBER

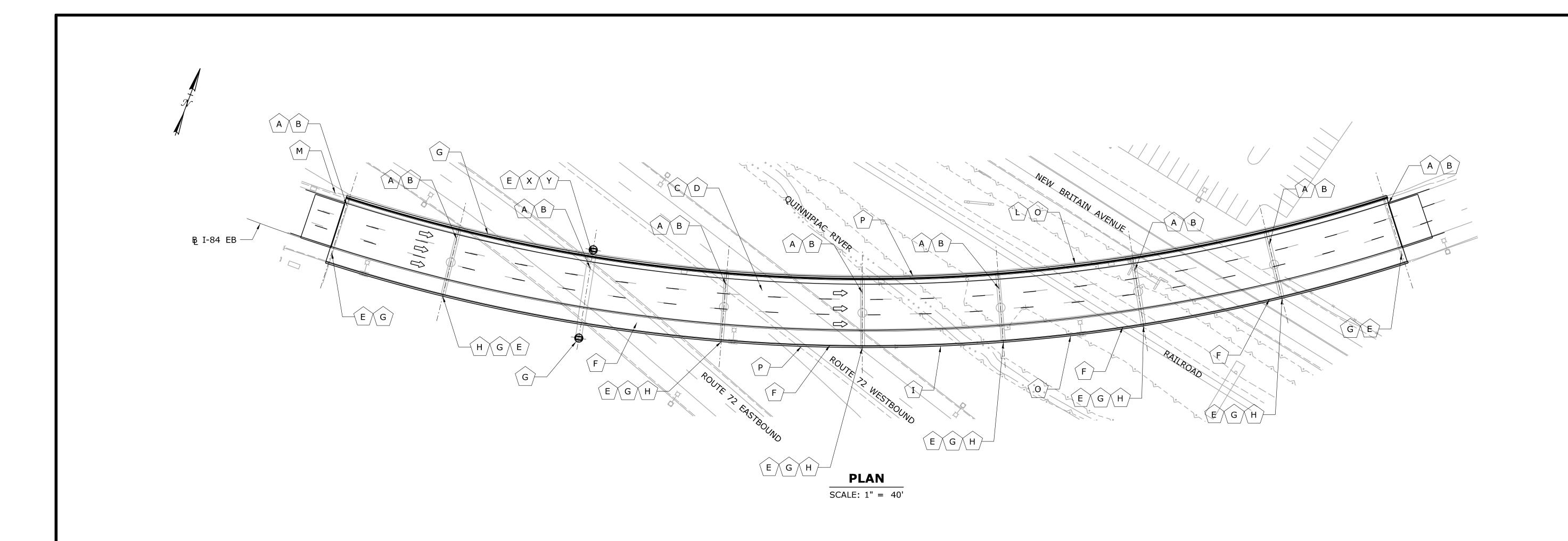
(BEYOND)

 $1\frac{1}{2}$ " (TYP.)

(TYP.)







| | SCOPE OF WORK LEGEND | | | |
|-------------|---|--|--|--|
| DESIGNATION | DESCRIPTION OF WORK | | | |
| Α | REPLACE JOINTS AT ABUTMENTS AND PIERS | | | |
| В | REPAIR DECK ENDS AT EACH JOINT AS REQUIRED | | | |
| С | MILL DECK, FULL AND PARTIAL DEPTH DECK PATCH | | | |
| D | PLACE NEW MEMBRANE WATERPROOFING AND BITUMINOUS OVERLAY OVER ENTIRE DECK | | | |
| E | CLEAN AND PAINT BEAM ENDS, BEARING DEVICES, STEEL PIER CAP AND OTHER AREAS AS NEEDED | | | |
| F | REMOVE HAUNCHES OVER ROADWAY AND RAILROAD | | | |
| G | REPAIR SUBSTRUCTURE AS NECESSARY | | | |
| Н | REPAIR POST-TENSIONING ANCHORAGE AT PIER CAPS; PROVIDE TEMPORARY SUPPORT OF PIER CAPS | | | |
| I | REPAIR SUPERSTRUCTURE AS NECESSARY | | | |
| L | MODIFY BRIDGE PARAPETS TO SAFETY SHAPE | | | |
| M | MODIFY APPROACH END BLOCK AND UPDATE LEADING END GUIDRAIL ATTACHMENT | | | |
| 0 | MODIFY BRIDGE PARAPET WITH CONCRETE CAP | | | |
| Р | REPAIR PARAPETS AS REQUIRED (FULL LENGTH) | | | |
| X | REPLACE EXISTING BRIDGE PINS WITH NEW BRIDGE PINS | | | |
| Υ | CLEAN AND PAINT STEEL PIER CAP | | | |

| | | | | | DES |
|---|---|---|---|--|-----|
| - | - | • | - | THE INFORMATION, INCLUDING ESTIMATED | |
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED | CHE |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE | |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES | |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. | |
| _ | - | - | _ | | |

REVISION DESCRIPTION

SHEET NO. Plotted Date: 7/17/2015

SNER/DRAFTER:

JRA

KED BY:

AML

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\S-22 03312 - SCOPE OF WORK.dgn



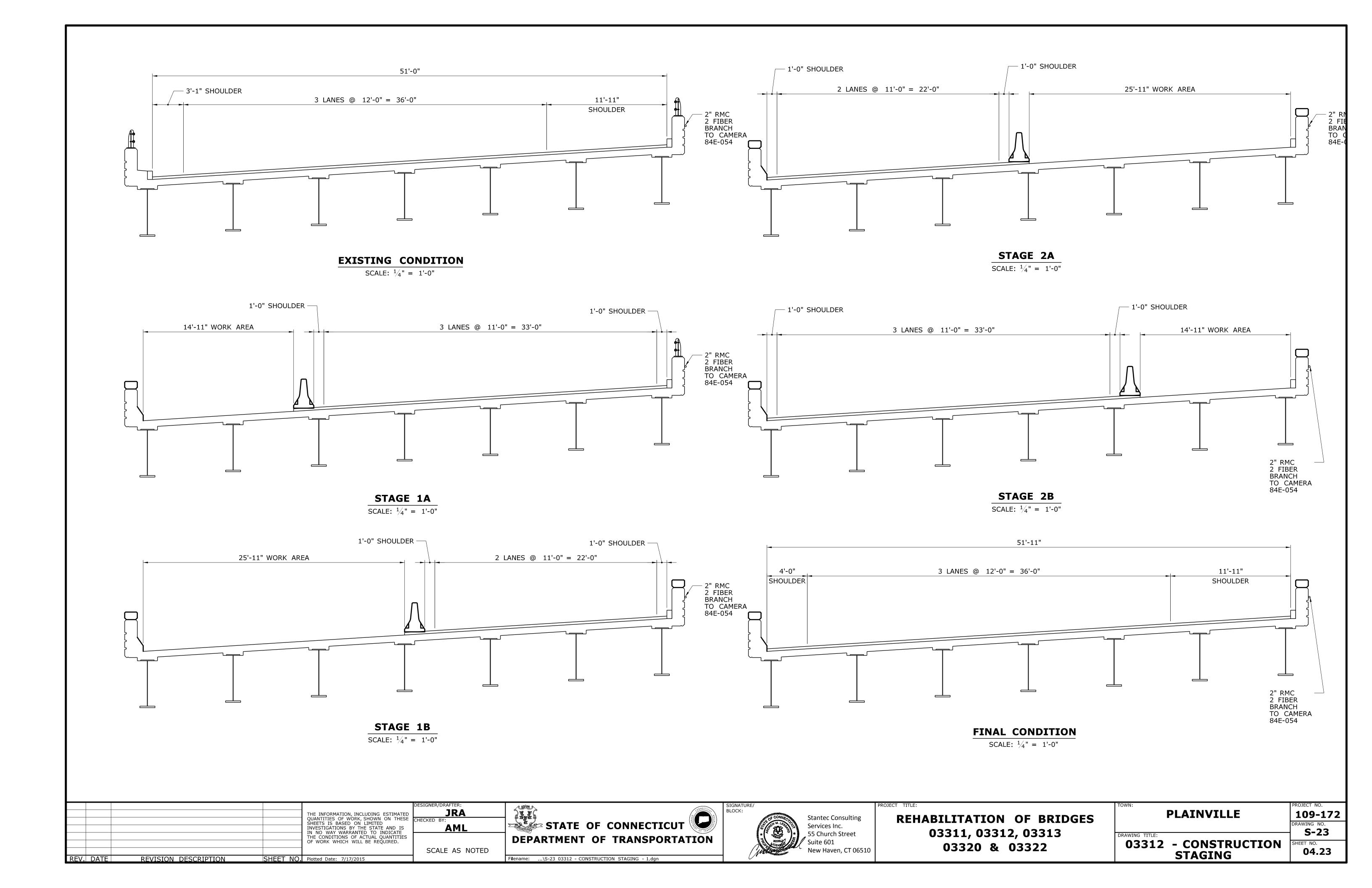
PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| OWN: | | NVILLE BRITA | |
|--------|--------|-----------------|--|
| | | | |
| RAWING | TITLE: | | |
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O3312 - SCOPE OF WORK
SHEET NO.
04.22

109-0172
DRAWING NO.
S-22
SHEET NO.



S-83

1. CONCRETE REPAIR DETAILS - 1

PLAINVILLE & NEW BRITAIN

03312 - ABUTMENT 1

PLAN & ELEVATION

REHABILITATION OF BRIDGES

03311, 03312, 03313

03320 & 03322

Stantec Consulting

New Haven, CT 06510

Services Inc.

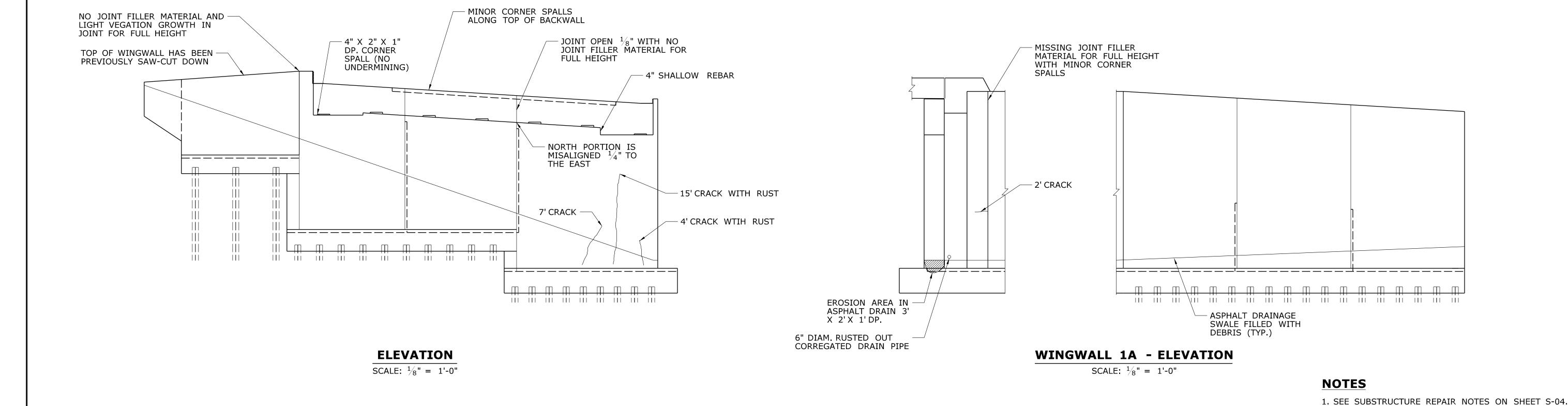
Suite 601

55 Church Street

109-0172

S-24

04.24



STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-24 03312 - ABUTMENT 1 PLAN & ELEVATION.dgn

JRA

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SHEET NO. Plotted Date: 7/17/2015

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

- - -

- | - | -

_ - -

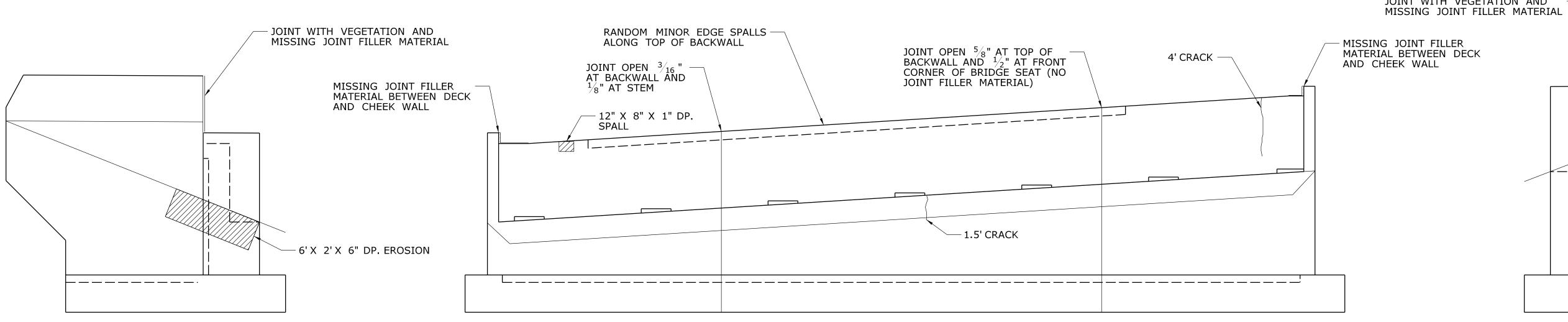
- - -

REV. DATE

HOLLOW CONCRETE

S-83

1. CONCRETE REPAIR DETAILS - 1



JOINT WITH VEGETATION AND 1' CRACK WITH -**EFFLORESCENCE**

WINGWALL 2B - ELEVATION

SCALE: $\frac{1}{4}$ " = 1'-0"

NOTES

1. SEE SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

WINGWALL 2A - ELEVATION

SCALE: $\frac{1}{4}$ " = 1'-0"



SPALL

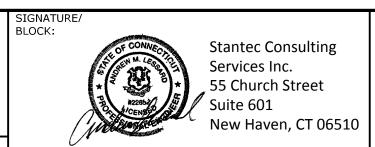
HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. REV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: 7/17/2015

JRA **AML** STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-25 03312 - ABUTMENT 2 PLAN & ELEVATION.dgn

ELEVATION

SCALE: $\frac{1}{4}$ " = 1'-0"



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

PLAINVILLE & NEW BRITAIN

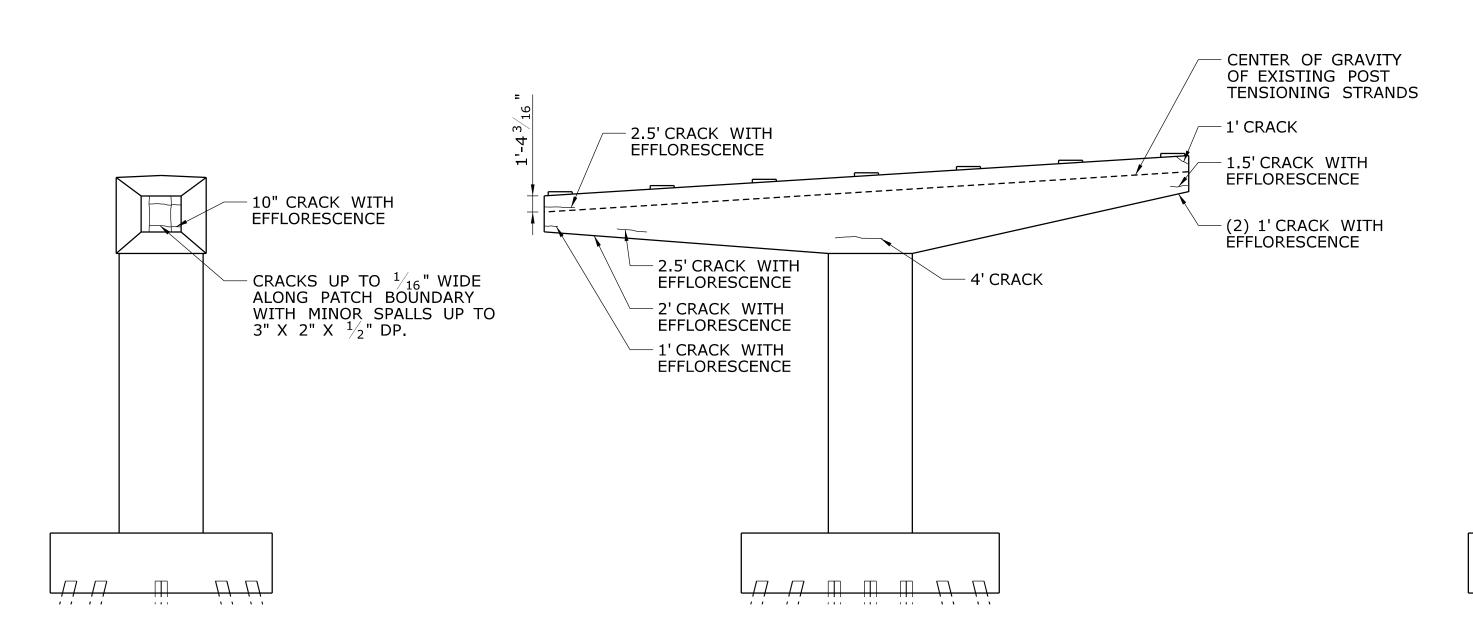
03312 - ABUTMENT 2 PLAN & ELEVATION

109-0172 DRAWING NO.

S-25 04.25

S-83

1. CONCRETE REPAIR DETAILS - 1



- CRACKS UP TO $^1\!/_{32}$ " WITH EFFLORESCENCE ALONG CENTER OF GRAVITY PATCH BOUNDARY OF EXISTING POST TENSIONING STRANDS ------— 1' CRACK $-6" X \frac{1}{32}" CRACK$ 4' CRACK -3' X 2' X 1" DP. ON UNDERSIDE OF CAP, EXTENDS 2" INTO VERTICAL FACE

PIER 1 **NORTH ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 1 WEST ELEVATION SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 1 **SOUTH ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0"

EAST ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 1

CONCRETE DETERIORATION LEGEND

CRACK

SPALL

HOLLOW CONCRETE

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JRA **AML**

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-26 03312 - PIER 1 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

NOTES

| TOWN: | PLAI NEW | NVILLE BRITAI |
|---------|-------------|------------------|
| DRAWING | TITLE: | |
| | | |

1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO

2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE

SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT

NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED

IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED.

PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.

EXCEED 3/4" FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.

3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

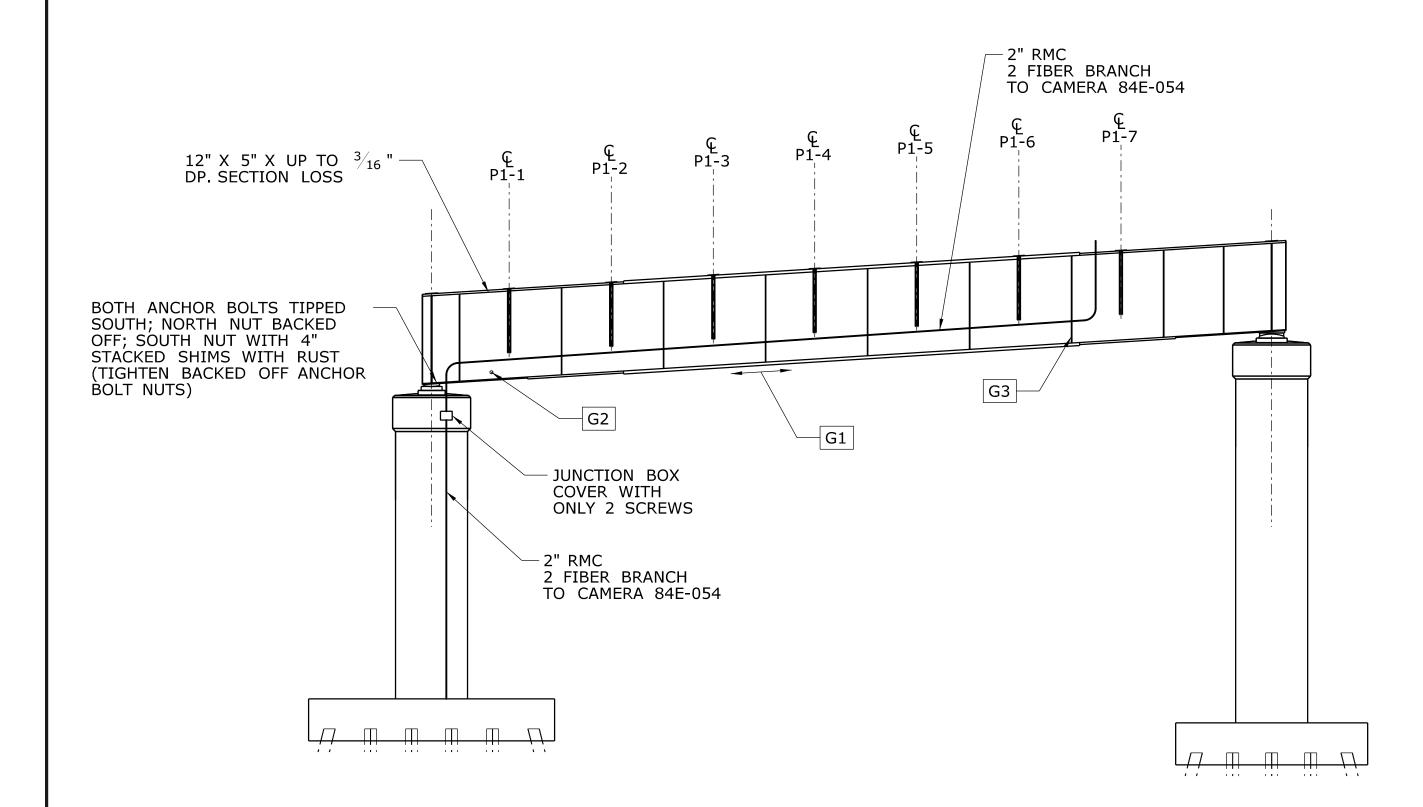
03312 - PIER 1 **PLAN & ELEVATION**

109-0172

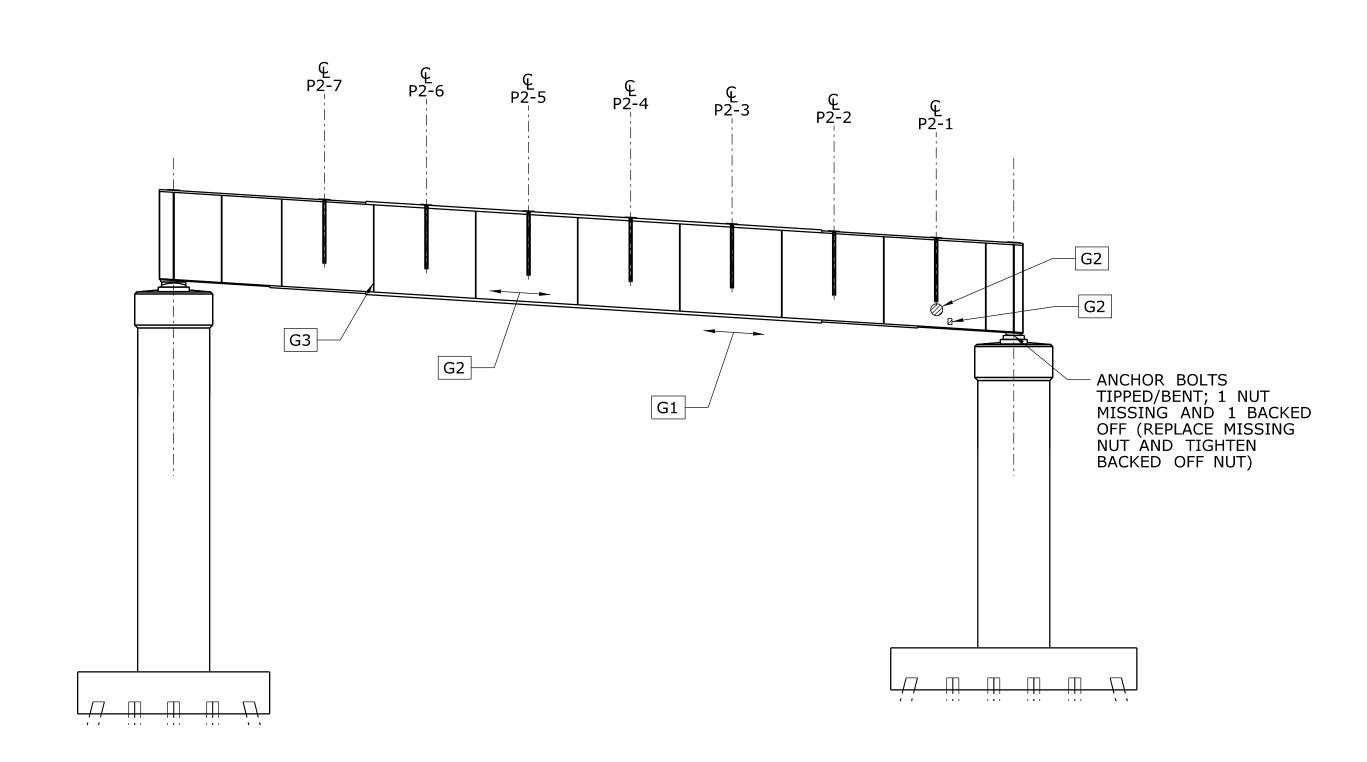
S-26

04.26

DRAWING NO.







PIER 2 EAST ELEVATION SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

1. SEE ADDITIONAL SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

- - - -- - - -

REV. DATE

HOLLOW CONCRETE

| TYPE | STEEL REPAIR | REF. |
|------|-----------------------------|------|
| G1 | GIRDER BOTTOM FLANGE REPAIR | S-91 |
| G2 | GIRDER WEB REPAIR | S-92 |
| G3 | GIRDER STIFFENER REPAIR | S-92 |

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - - -- - -

SHEET NO. Plotted Date: 7/17/2015

JRA **AML**

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-27 03312 - PIER 2 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| OWN: | | | |
|--------|---------|-----------------|--|
| | | NVILLE BRITA | |
| RAWING | TITI F: | | |

03312 - PIER 2

DRAWING NO.

S-27 04.27 PLAN & ELEVATION

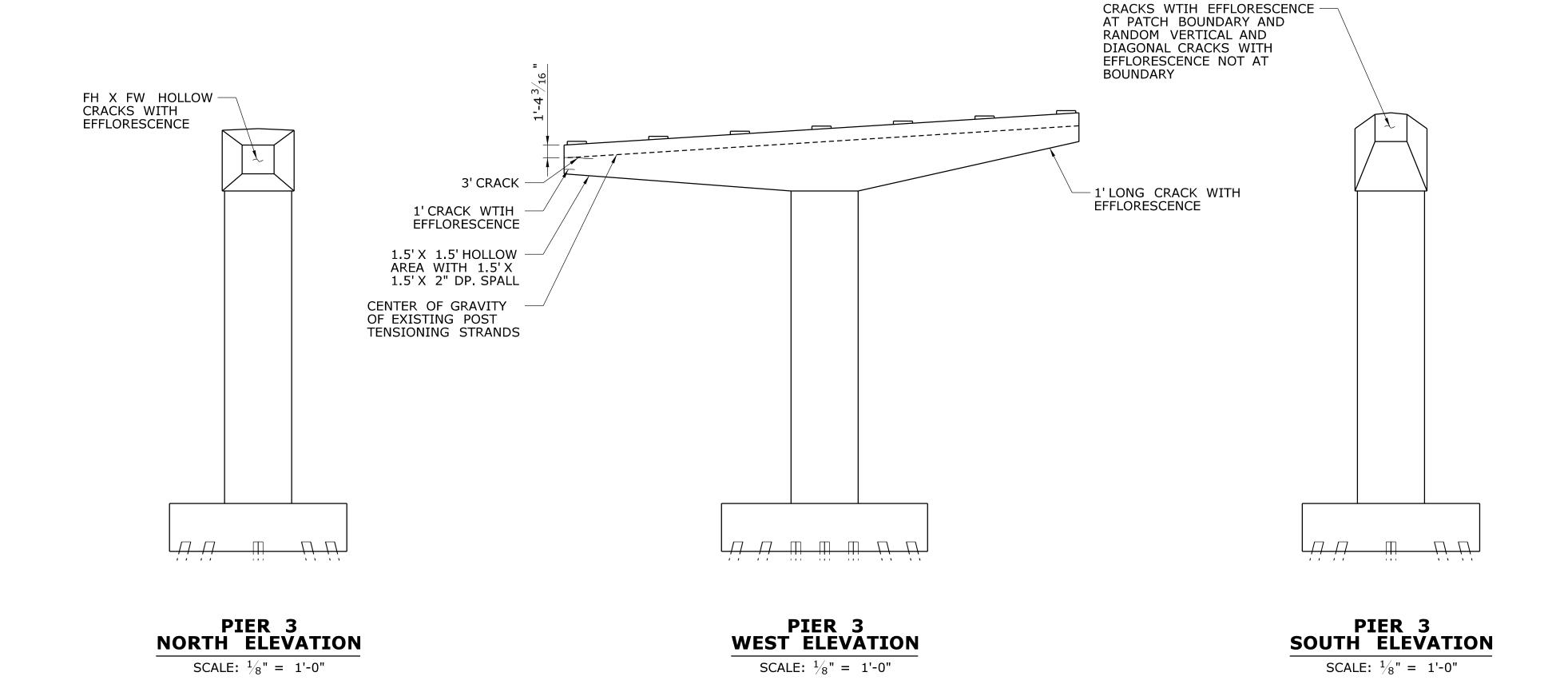
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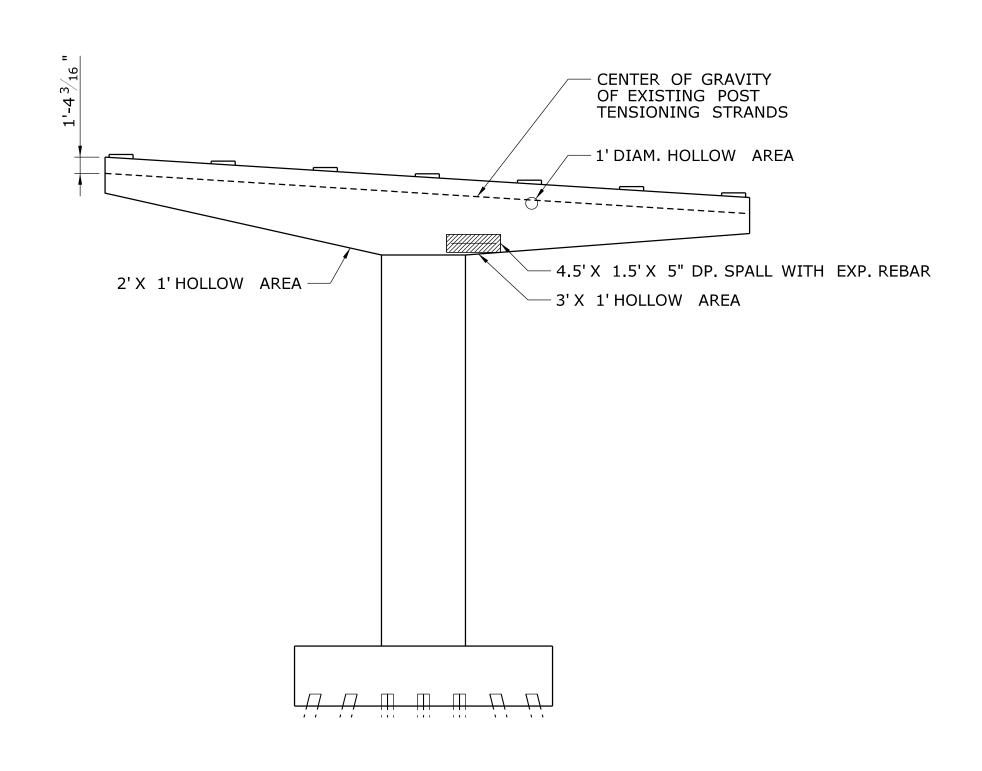
REFERENCE

SHEET

S-83

1. CONCRETE REPAIR DETAILS - 1





PIER 3 EAST ELEVATION SCALE: \frac{1}{8}" = 1'-0"

NOTES

- CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $\frac{3}{4}$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

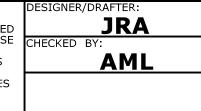


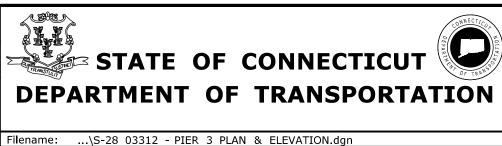
SPALL

HOLL

HOLLOW CONCRETE

| - | _ | - | _ | THE INFORMATION, INCLUDING ESTIMATED |
|------|------|----------------------|-----------|---|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
| _ | - | - | - | |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/17/2015 |







REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | | | |
|---------|--------|----|--------------|-------------------------|
| DRAWING | TITLE: | | | |
| | | PI | PLAIN NEW | PLAINVILLE NEW BRITA |

109-0172
DRAWING NO.
S-28
SHEET NO.
04.28

03312 - PIER 3 PLAN & ELEVATION

S-83

2' CRACK WITH

EFFLORESCENCE

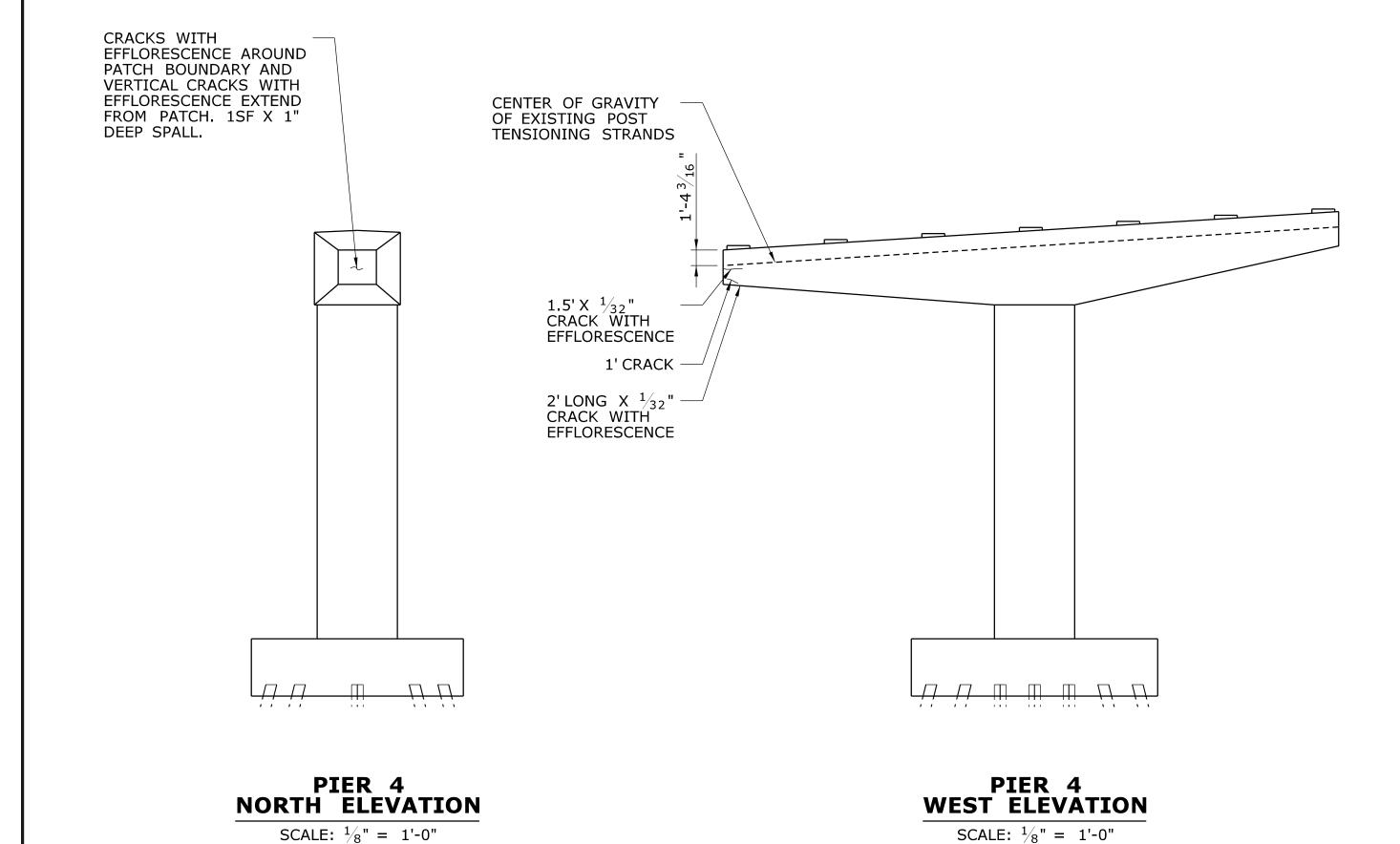
109-0172

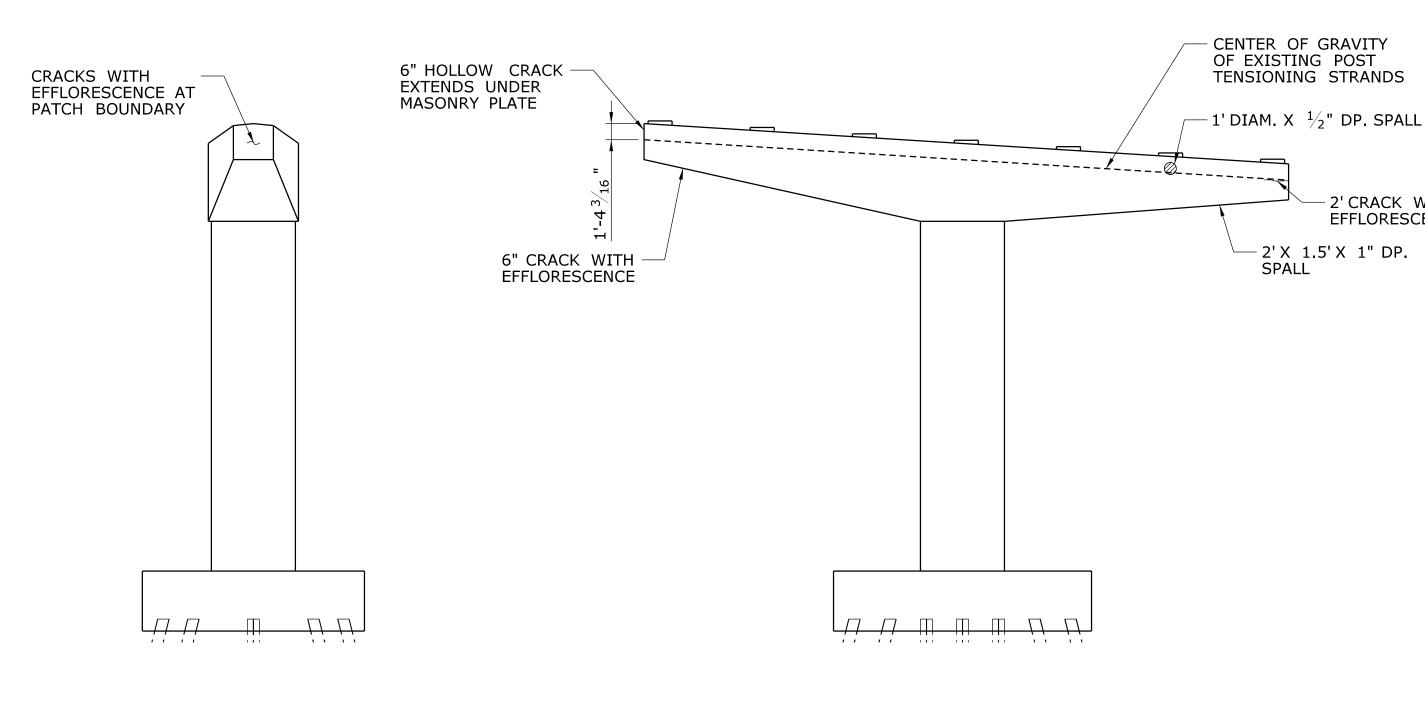
S-29

04.29

DRAWING NO.

1. CONCRETE REPAIR DETAILS - 1





PIER 4 **SOUTH ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 4 **EAST ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

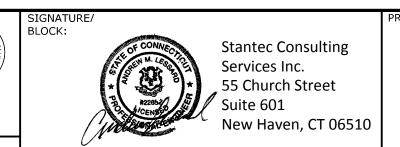
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SHEET NO. Plotted Date: 7/17/2015

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STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-29 03312 - PIER 4 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | PLAIN NEW | VILLE BRITAI |
|---------|--------|--------------|-----------------|
| DRAWING | TITLE: | | |

03312 - PIER 4 PLAN & ELEVATION

S-83

1. CONCRETE REPAIR DETAILS - 1

1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO

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IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED.

PLAINVILLE &

NEW BRITAIN

03312 - PIER 5

PLAN & ELEVATION

109-0172

S-30

04.30

DRAWING NO.

PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.

EXCEED 3/4" FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.

DRAWING TITLE:

3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

REHABILITATION OF BRIDGES

03311, 03312, 03313

03320 & 03322

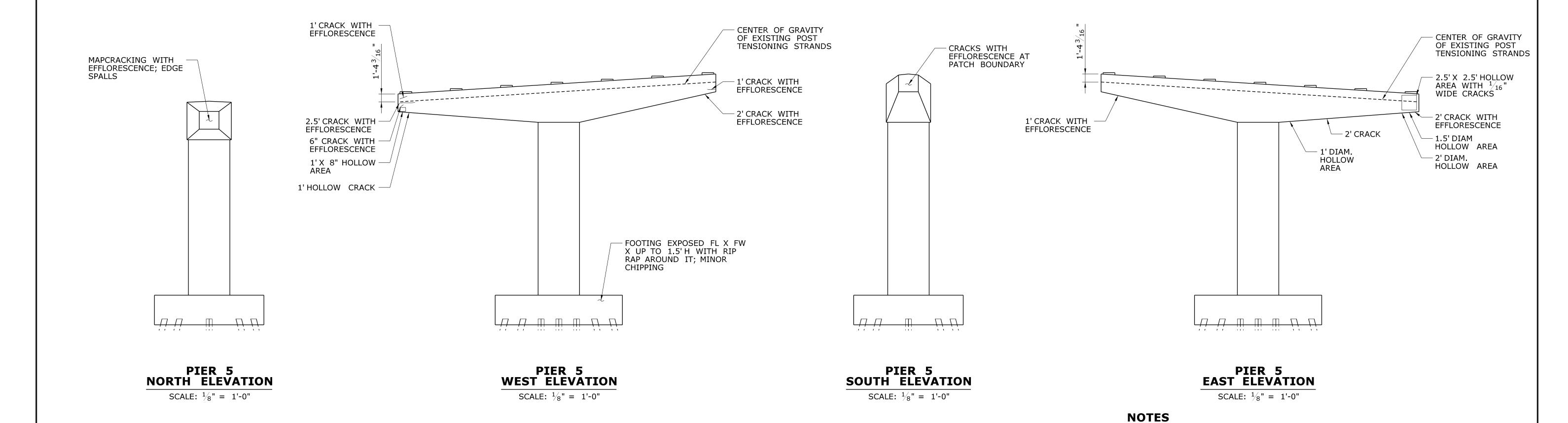
Stantec Consulting

New Haven, CT 06510

55 Church Street

Services Inc.

Suite 601



STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-30 03312 - PIER 5 PLAN & ELEVATION.dgn

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SHEET NO. Plotted Date: 7/17/2015

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

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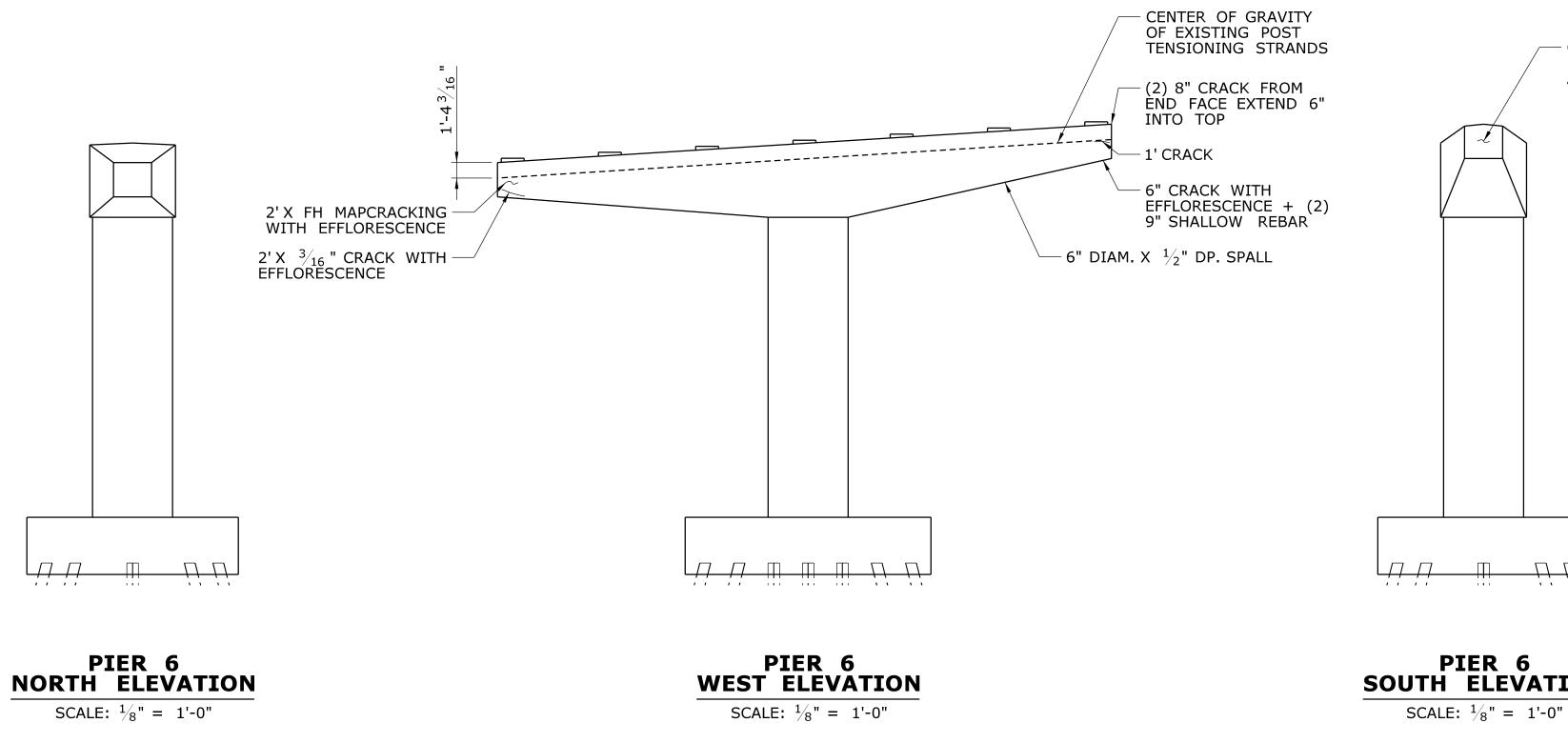
- | - | -

REV. DATE

HOLLOW CONCRETE

S-83

1. CONCRETE REPAIR DETAILS - 1



JRA

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SHEET NO. Plotted Date: 7/17/2015

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-31 03312 - PIER 6 PLAN & ELEVATION.dgn

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

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- | - | -

REV. DATE

HOLLOW CONCRETE

CRACKS WITH **EFFLORESCENCE** AT PATCH BOUNDARY

PIER 6 **SOUTH ELEVATION**

- CENTER OF GRAVITY OF EXISTING POST TENSIONING STRANDS - 2' X $\frac{1}{32}$ " CRACK WITH EFFLORESCENCE - 2' CRACK WITH EFFLORESCENC; 8" X 4" X 1" DP. SPALL 1' CRACK

PIER 6 **EAST ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
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- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

Stantec Consulting

55 Church Street

Services Inc.

Suite 601

REHABILITATION OF BRIDGES 0311, 03312, 03313

| PLAINVILLE & NEW BRITAIN |
|--------------------------|
| DRAWING TITLE: |
| 03312 - PIER 6 |

PLAN & ELEVATION

109-0172 DRAWING NO. S-31 04.31

New Haven, CT 06510

03320 & 03322

REFERENCE

SHEET

S-83

1. CONCRETE REPAIR DETAILS - 1

5' CRACK WITH RANDOM VOIDS/HOLLOW CONCRETE UP - HOLLOW CONCRETE AROUND TO 1" DP. ALONG CRACK CENTER OF GRAVITY — POST TENSIONED GROUT OF EXISTING POST POCKET; RANDOM CRACKS — 1' CRACK TENSIONING STRANDS AND EFFLORESCENCE, 2' X 9" X 1.5" DP. SPALL 1.5' CRACK WITH **EFFLORESCENCE** 1.5° X $^{1}\!\!/_{16}$ " CRACK WITH - EFFLORESCENCE 4' CRACK WITH **EFFLORESCENCE** — 3' CRACK 1' CRACK 1'X 1'MAPCRACKING - RANDOM SHRINKAGE AND MAPCRACKING ALONG COLUMN

PIER 7
WEST ELEVATION

SCALE: \frac{1}{8}" = 1'-0"

HOLLOW CONCRETE AROUND POST TENSIONED GROUT POCKET; RANDOM CRACKS AND EFFLORESCENCE; 4' CRACK — CENTER OF GRAVITY MAPCRACKING AT TOP OF EXISTING POST 3' CRACK -TENSIONING STRANDS 1' SHALLOW REBAR 1.5' CRACK WITH 4' CRACK 1'X 1'HOLLOW EFFLORESCENCE 3' X 8" AREA -(3) 6" SHALLOW REBAR HOLLOW AREA - 2' X 9" X 1" DP. — 1' CRACK SPALL WITH EXP. REBAR 4' X $\frac{1}{16}$ " CRACK -

PIER 7
SOUTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

EAST ELEVATION SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 7

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
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- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

PIER 7 NORTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

- - - THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

SHEET NO. Plotted Date: 7/17/2015

DESIGNER/DRAFTER:

JRA

CHECKED BY:

AML

S

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-32 03312 - PIER 7 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | PLAIN NEW | VILLE BRITAI |
|---------|--------|--------------|-----------------|
| DRAWING | TITLE: | | |

NEW BRITAIN

NG TITLE:

03312 - PIER 7

PLAN & ELEVATION

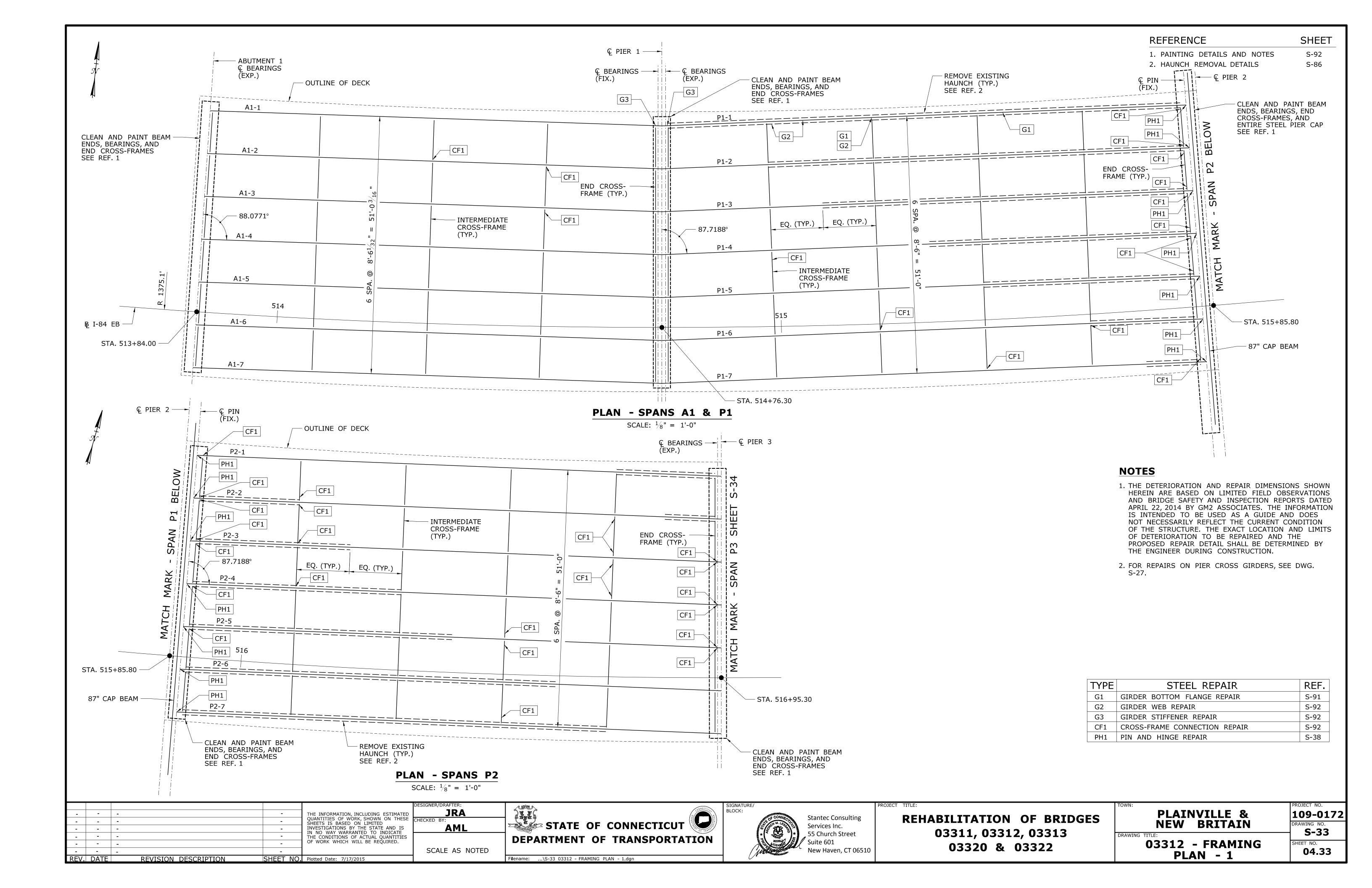
DRAWING NO.

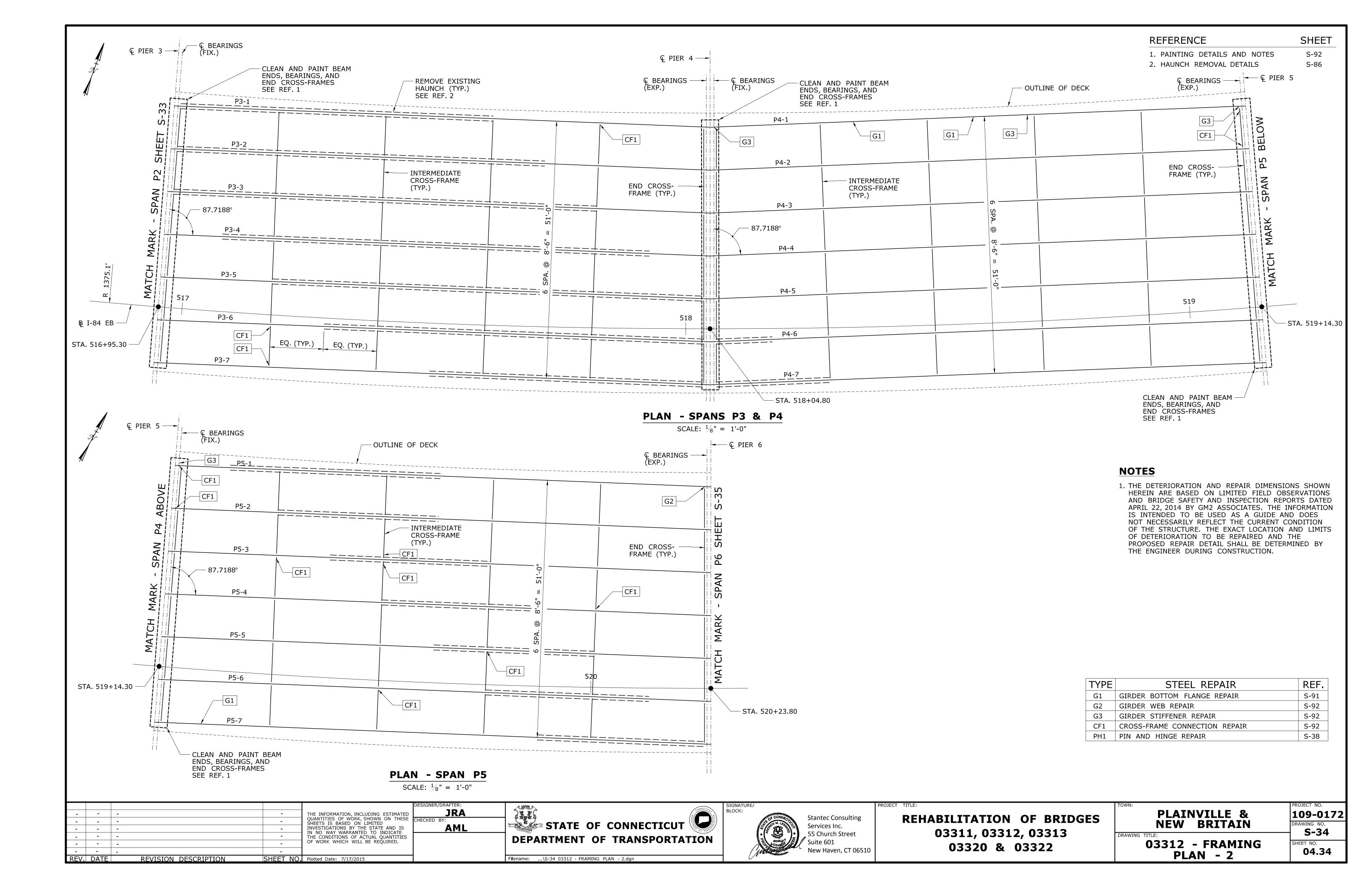
S-32

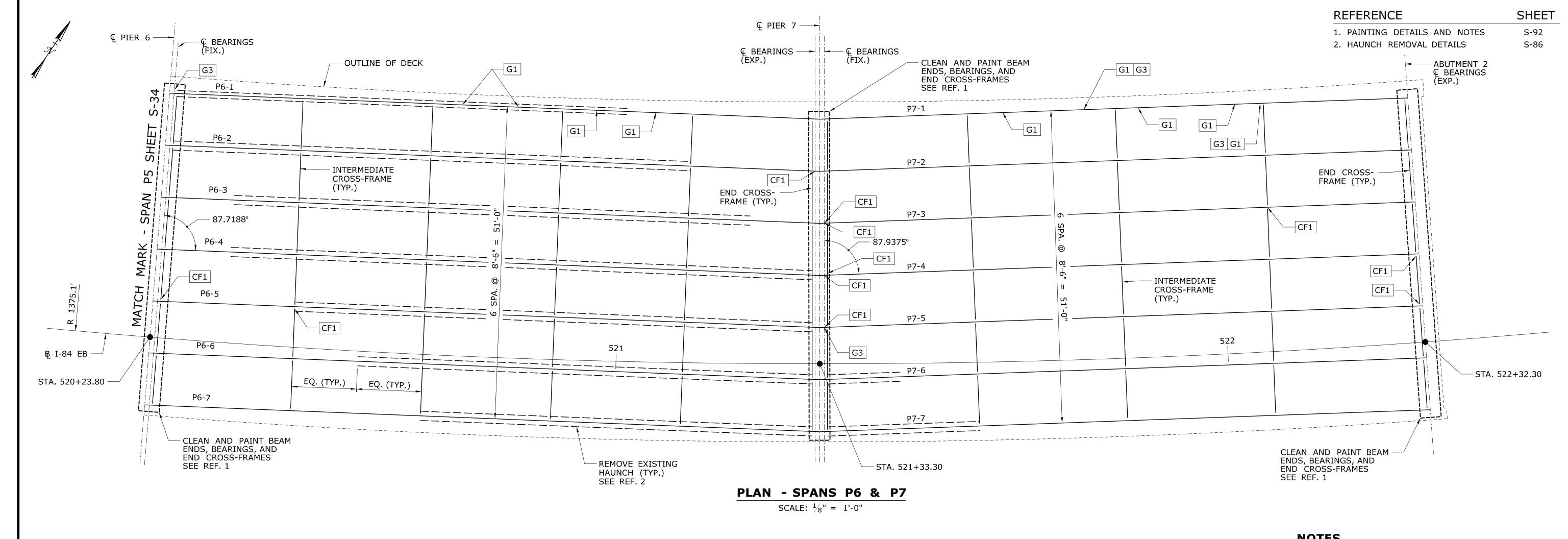
SHEET NO.

04.32

109-0172





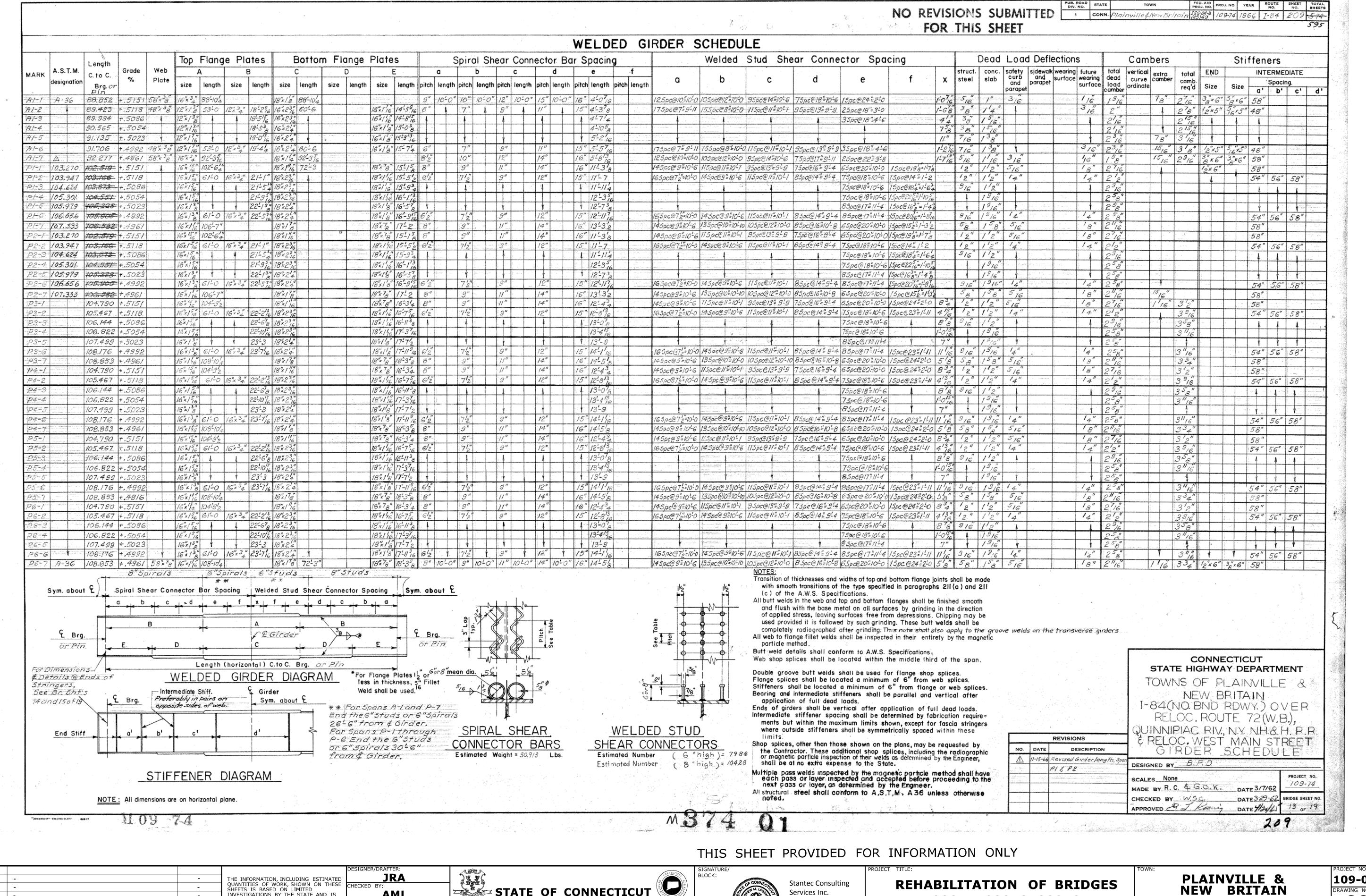


NOTES

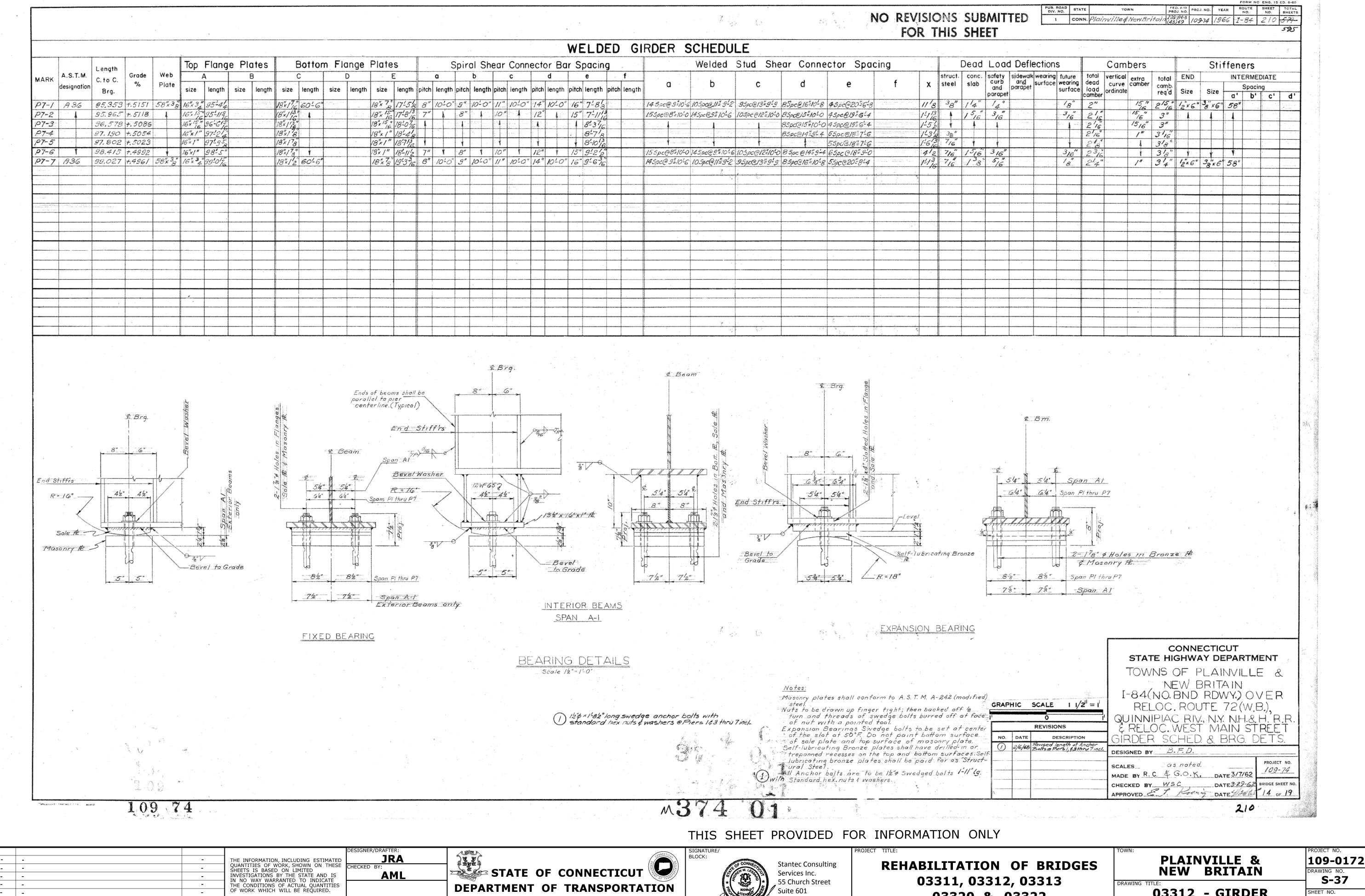
1. THE DETERIORATION AND REPAIR DIMENSIONS SHOWN HEREIN ARE BASED ON LIMITED FIELD OBSERVATIONS AND BRIDGE SAFETY AND INSPECTION REPORTS DATED APRIL 22, 2014 BY GM2 ASSOCIATES. THE INFORMATION IS INTENDED TO BE USED AS A GUIDE AND DOES NOT NECESSARILY REFLECT THE CURRENT CONDITION OF THE STRUCTURE. THE EXACT LOCATION AND LIMITS OF DETERIORATION TO BE REPAIRED AND THE PROPOSED REPAIR DETAIL SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

| TYPE | STEEL REPAIR | REF. |
|------|-------------------------------|------|
| G1 | GIRDER BOTTOM FLANGE REPAIR | S-91 |
| G2 | GIRDER WEB REPAIR | S-92 |
| G3 | GIRDER STIFFENER REPAIR | S-92 |
| CF1 | CROSS-FRAME CONNECTION REPAIR | S-92 |
| PH1 | PIN AND HINGE REPAIR | S-38 |

| | | THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. | STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION | SIGNATURE/ BLOCK: Stantec Consulting Services Inc. 55 Church Street Suite 601 New Haven, CT 06510 | REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322 | PLAINVILLE & NEW BRITAIN DRAWING TITLE: 03312 - FRAMING PLAN - 3 | PROJECT NO. 109-0172 DRAWING NO. S-35 SHEET NO. 04.35 |
|-----------|------------------------------|---|--|--|---|--|--|
| REV. DATE | REVISION DESCRIPTION SHEET N | O. Plotted Date: 7/17/2015 | Filename:\S-35 03312 - FRAMING PLAN - 3.dgn | | | PLAN - 3 | |



| | | - THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - REVISION DESCRIPTION SHEET NO. Plotted Date: 7/17/2015 | DESIGNER/DRAFTER: JRA CHECKED BY: AML DEPARTMENT OF TRANSPORTATION Filename:\S-36 03312 - GIRDER SCHEDULE - 1.dgn | SIGNATURE/ BLOCK: Stantec Consulting Services Inc. 55 Church Street Suite 601 New Haven, CT 06510 | REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322 | PLAINVILLE & NEW BRITAIN DRAWING TITLE: 03312 - GIRDER SCHEDULE - 1 | PROJECT NO. 109-0172 DRAWING NO. S-36 SHEET NO. 04.36 |
|--|--|---|--|--|---|---|--|
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Filename: ...\S-37 03312 - GIRDER SCHEDULE - 2.dgn

REVISION DESCRIPTION

SHEET NO. Plotted Date: 7/17/2015

REV. DATE

New Haven, CT 06510

03320 & 03322

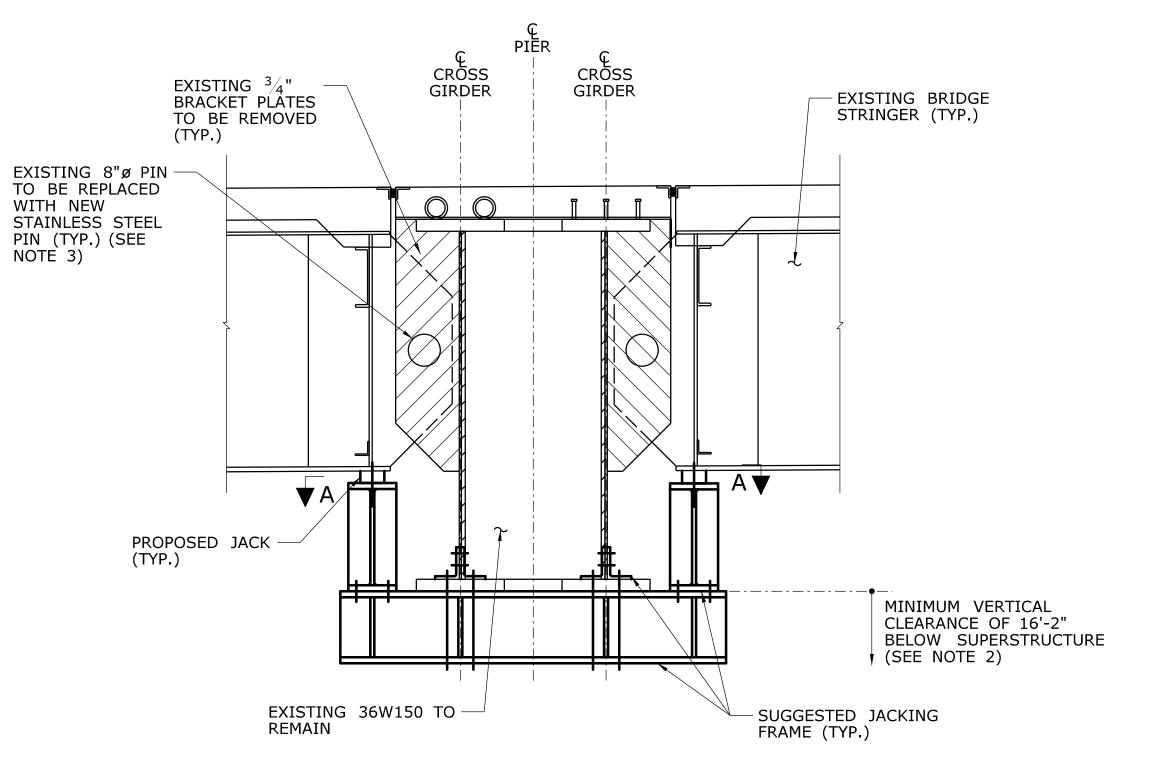
03312 - GIRDER SCHEDULE - 2

S-37 04.37

SHEET

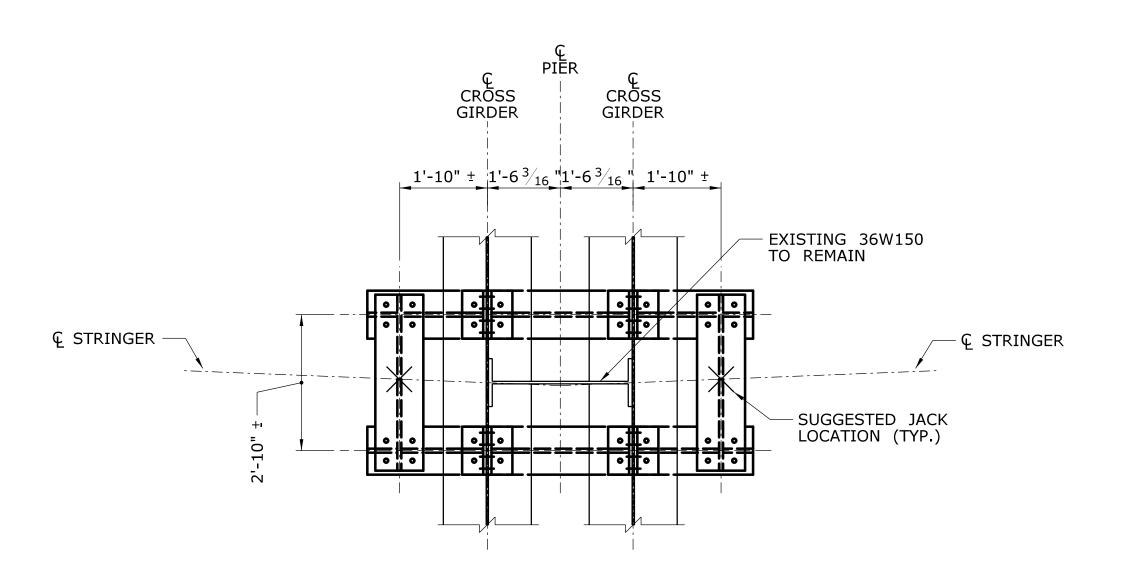
S-19

1. 03311 - PIN REPLACEMENT DETAILS



REMOVAL SECTION AND SUGGESTED JACKING ASSEMBLY

SCALE: $\frac{1}{2}$ " = 1'-0"



SECTION A-A SCALE: $\frac{1}{2}$ " = 1'-0"

NOTES

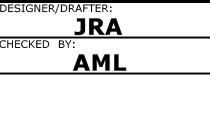
- 1. THE JACKING FRAME AS SHOWN ON THIS DRAWING IS SUGGESTED. CONTRACTOR SHALL PROVIDE THE DESIGN FOR THE JACKING SYSTEM USED. DRAWINGS AND CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT SHALL BE SUBMITTED FOR APPROVAL.
- PER THE INSPECTION REPORT BY GM2 ASSOCIATES, INC. DATED APRIL 22, 2014, THE MINIMUM VERTICAL CLEARANCE AT PIER 1 BELOW THE SUPERSTRUCTURE IS 16'-2". THE MINIMUM VERTICAL CLEARANCE ALLOWED BELOW THE SUGGESTED JACKING FRAME IS 16'-0". THE CONTRACTOR SHALL VERIFY THAT THIS MINIMUM VERTICAL CLEARANCE CAN BE MET PRIOR TO FABRICATION OF THE JACKING SYSTEM OR THAT THE FRAME CAN BE INSTALLED WITH LANE CLOSURES.
- 3. PROPOSED PIN SHALL BE STAINLESS STEEL AND HAVE A MINIMUM Fy=50 KSI.
- 4. FOR PROPOSED DETAILS, SEE REF. 1.
- 5. JACKING OF GIRDERS FOR PURPOSE OF REPLACING PINS AND BRACKET PLATES SHALL BE PAID FOR UNDER THE ITEM "TEMPORARY SUPPORT ASSEMBLY".
- 6. JACKING FRAME USED FOR REPLACING BRIDGE PINS AND BRACKET PLATES SHALL BE PAID FOR UNDER THE ITEM "TEMPORARY SUPPORT ASSEMBLY".

| | | | | | DE |
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| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED | |
| - | - | - | 1 | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED | СН |
| - | - | - | I | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE | |
| - | - | - | ı | THE CONDITIONS OF ACTUAL QUANTITIES | |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. | |
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SHEET NO. Plotted Date: 7/17/2015

REVISION DESCRIPTION

REV. DATE





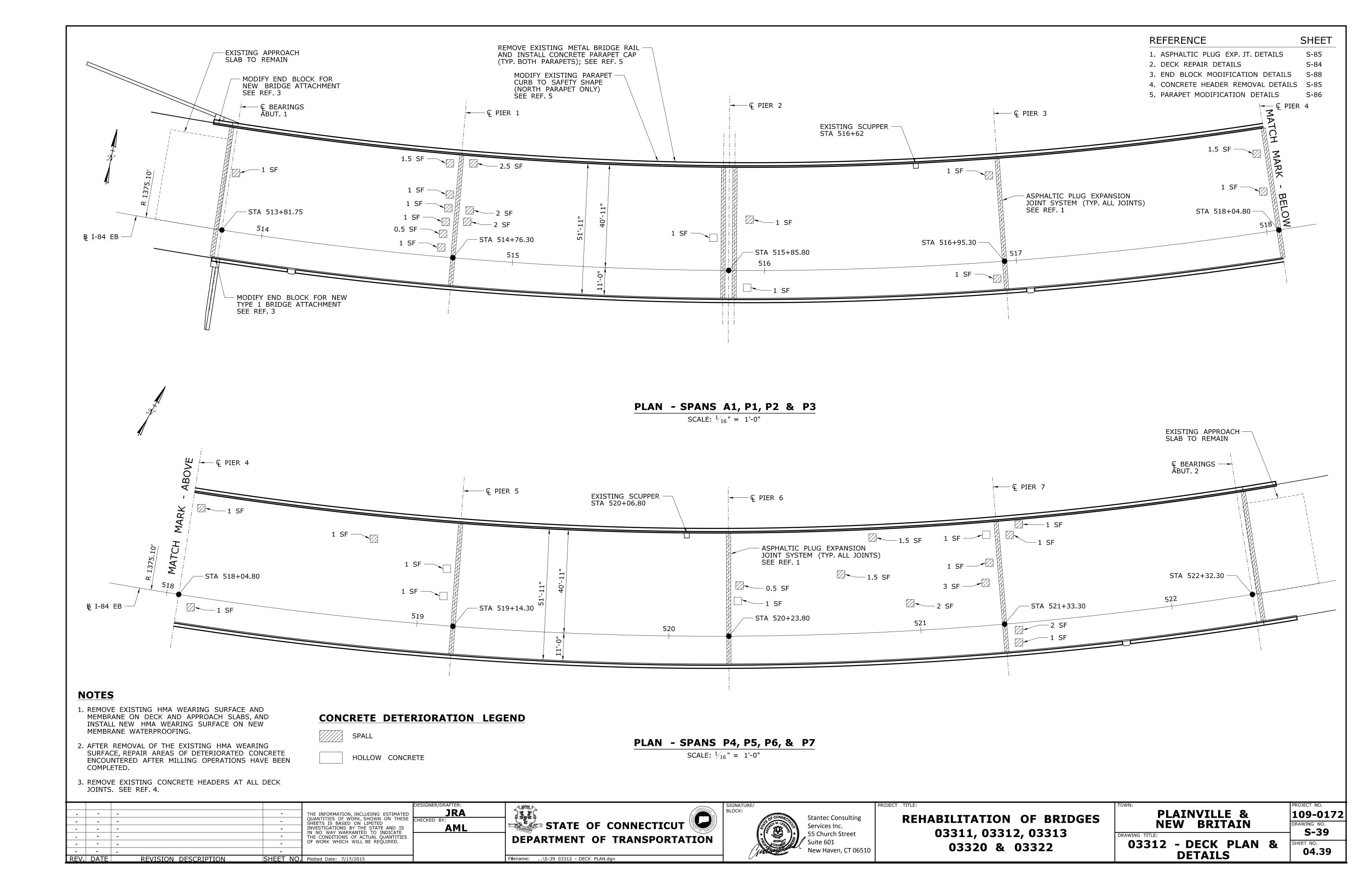


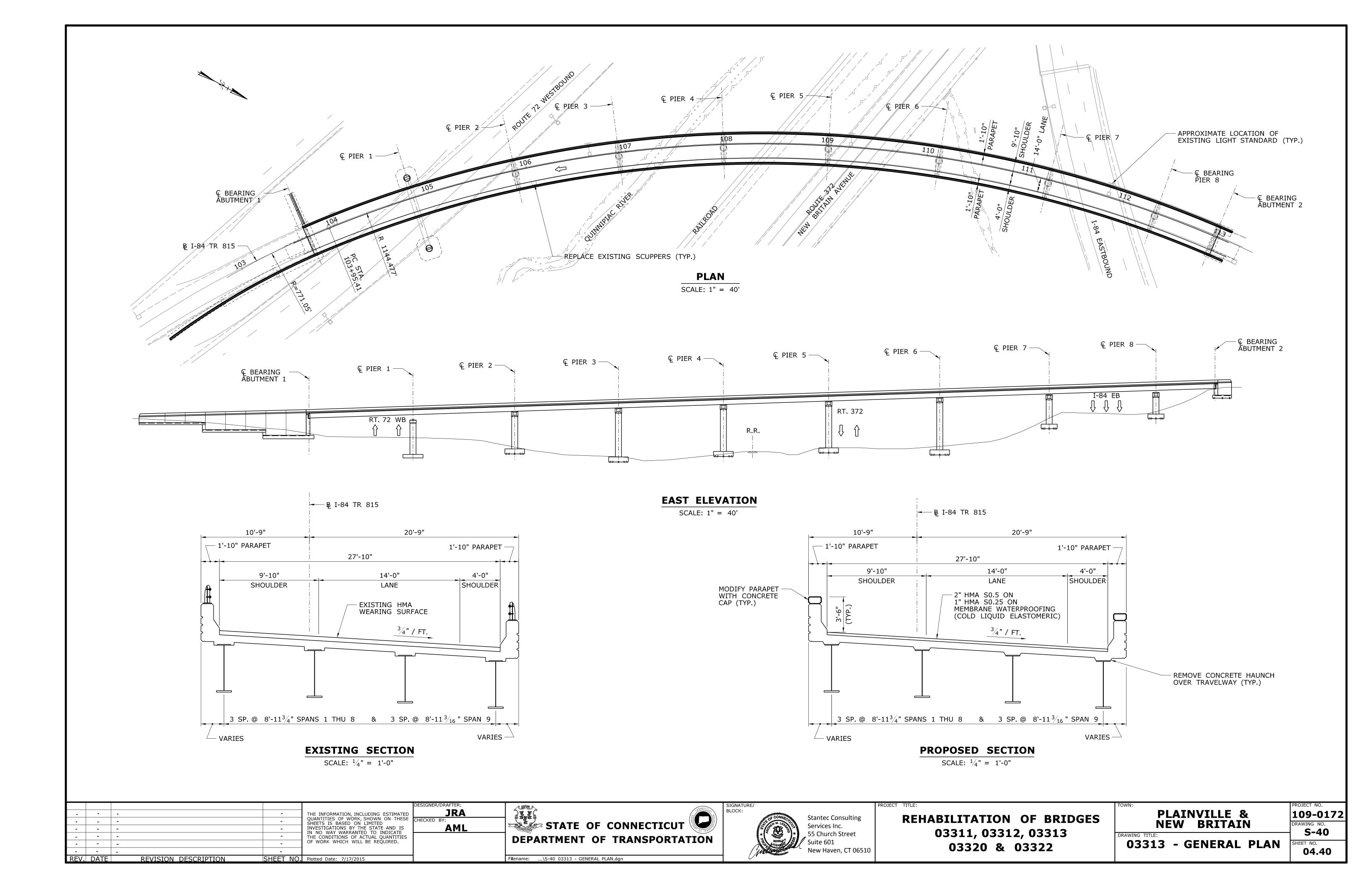
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

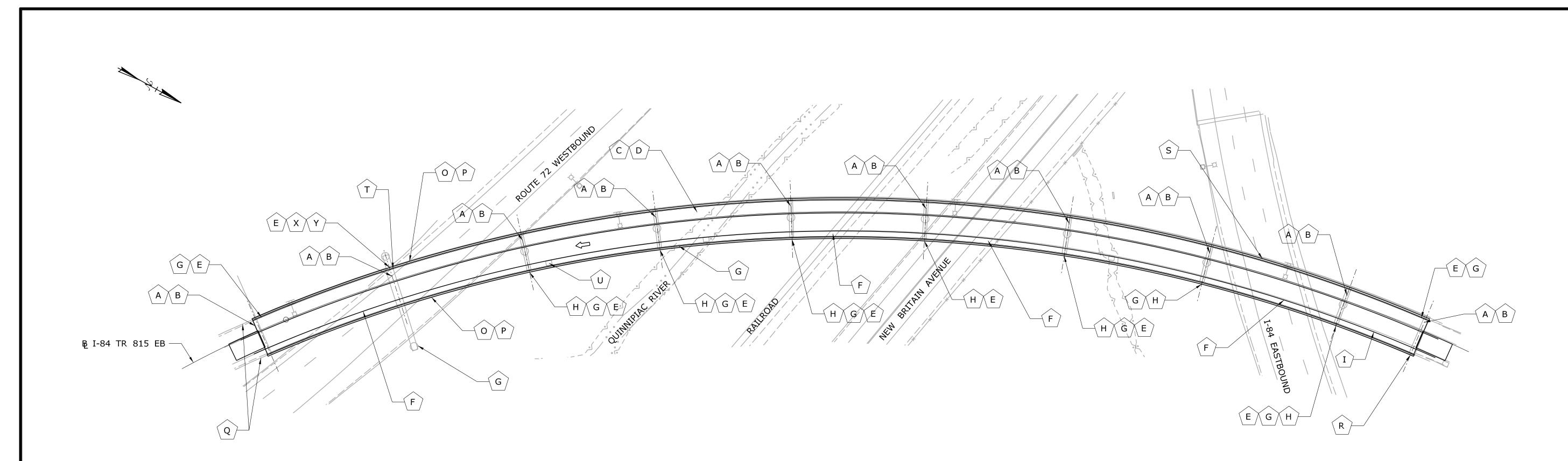
| TOWN: | | |
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| | | |
| | PLAI | NVILLE & |
| | NFW | BRITAIN |
| | IAFAA | DITTIATI |
| DRAWING | TITLE: | |

03312 - PIN

109-0172 DRAWING NO. **S-38** 04.38 REPLACEMENT DETAILS







PLANCALE: 1" = 40'

| | SCOPE OF WORK LEGEND | | | | |
|-------------|---|--|--|--|--|
| DESIGNATION | DESCRIPTION OF WORK | | | | |
| А | REPLACE JOINTS AT ABUTMENTS AND PIERS | | | | |
| В | REPAIR DECK ENDS AT EACH JOINT AS REQUIRED | | | | |
| С | MILL DECK, FULL AND PARTIAL DEPTH DECK PATCH | | | | |
| D | PLACE NEW MEMBRANE WATERPROOFING AND BITUMINOUS OVERLAY OVER ENTIRE DECK | | | | |
| Е | CLEAN AND PAINT BEAM ENDS, BEARING DEVICES, STEEL PIER CAP AND OTHER AREAS AS NEEDED | | | | |
| F | REMOVE HAUNCHES OVER ROADWAY AND RAILROAD | | | | |
| G | REPAIR SUBSTRUCTURE AS NECESSARY | | | | |
| Н | REPAIR POST-TENSIONING ANCHORAGE AT PIER CAPS; PROVIDE TEMPORARY SUPPORT OF PIER CAPS | | | | |
| I | REPAIR SUPERSTRUCTURE AS NECESSARY | | | | |
| 0 | MODIFY BRIDGE PARAPET WITH CONCRETE CAP | | | | |
| Р | REPAIR PARAPETS AS REQUIRED (FULL LENGTH) | | | | |
| Q | UPDATE TRAILING END ATTACHMENT | | | | |
| R | COVER EXPOSED ABUTMENT FOOTING | | | | |
| S | PAINT SOUTH FASCIA GIRDER OVER I-84 | | | | |
| Т | CLEAN, PAINT, AND LUBRICATE FROZEN EXPANSION BEARINGS AT STEEL GIRDER PIER CAP | | | | |
| U | REPLACE EXISTING SCUPPERS | | | | |
| Х | REPLACE EXISTING BRIDGE PINS WITH NEW BRIDGE PINS | | | | |
| Y | CLEAN AND PAINT STEEL PIER CAP | | | | |

| | | | | | D |
|---|---|---|---|---|---|
| - | _ | - | 1 | THE INFORMATION, INCLUDING ESTIMATED | Ĺ |
| - | _ | - | | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED | С |
| - | _ | - | | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE | Ĺ |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES | Γ |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. | ĺ |
| - | _ | - | - | | i |

SHEET NO. Plotted Date: 7/17/2015

REVISION DESCRIPTION

REV. DATE

R/DRAFTER:

JRA

BY:

AML

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

Filename: ...\S-41 03313 - SCOPE OF WORK.dgn



PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322 PLAINVILLE & NEW BRITAIN
RAWING TITLE:

O3313 - SCOPE OF WORK
SHEET NO.
04.41

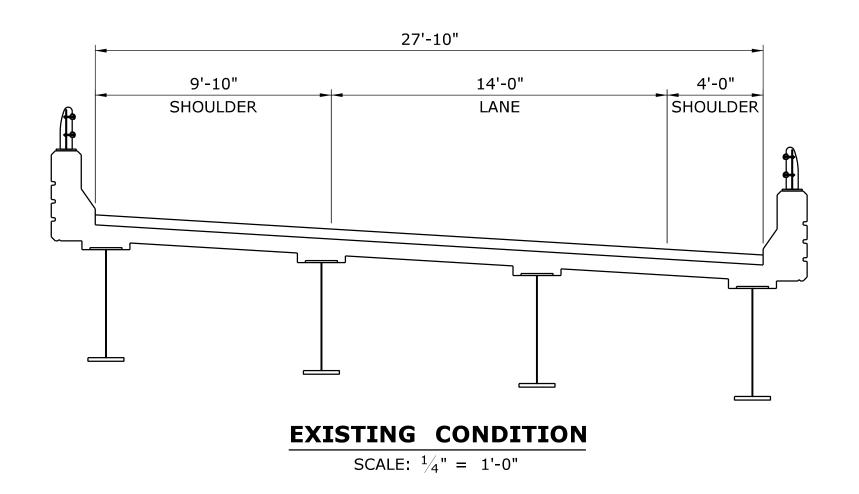
PROJECT NO.

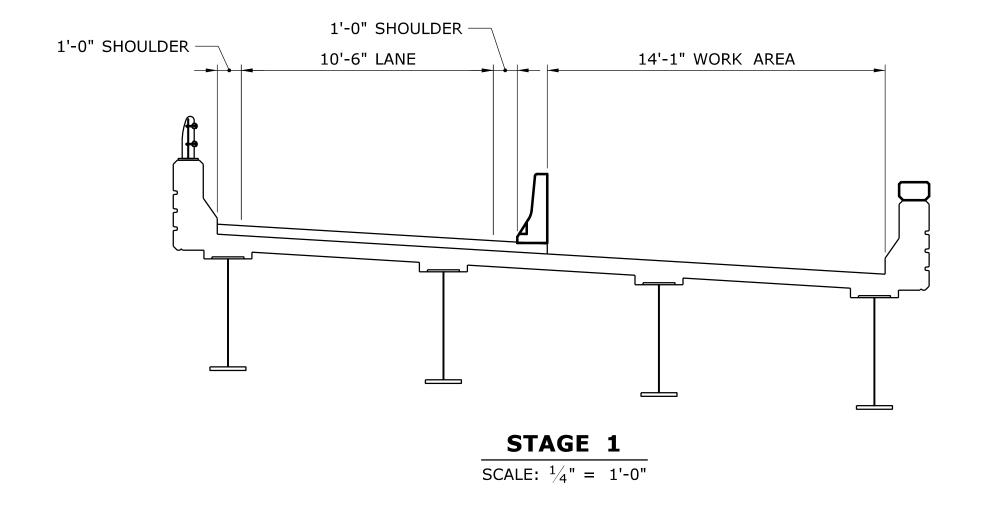
109-0172

DRAWING NO.

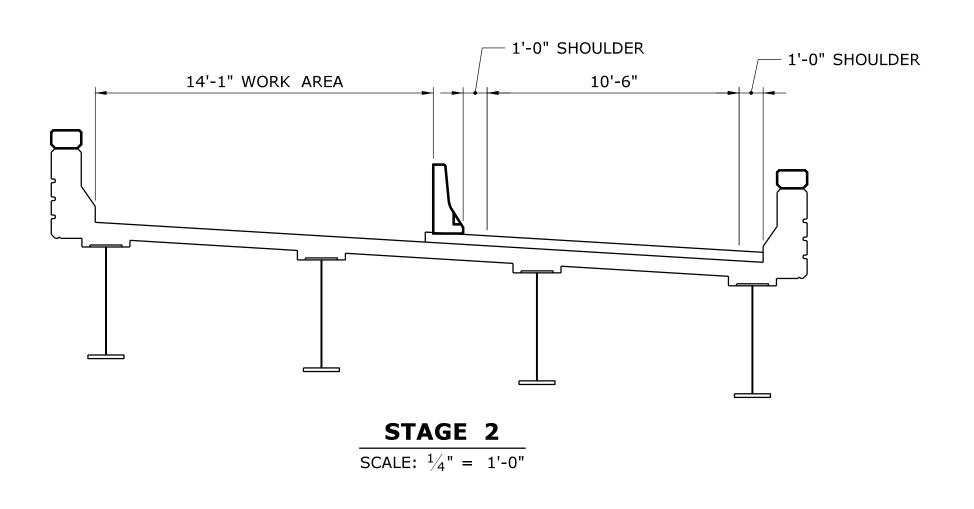
S-41

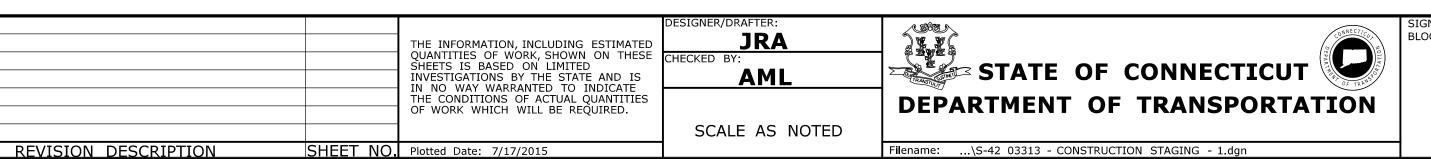
SHEET NO.





REV. DATE







REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

27'-10"

FINAL CONDITION

SCALE: $\frac{1}{4}$ " = 1'-0"

9'-10"

SHOULDER

14'-0"

SHOULDER

| | PLAINVILLE |
|------------|----------------|
| ING TITLE: | CONCEDUCATO |
| 3313 | - CONSTRUCTION |

03313 - CONSTRUCTION
STAGING

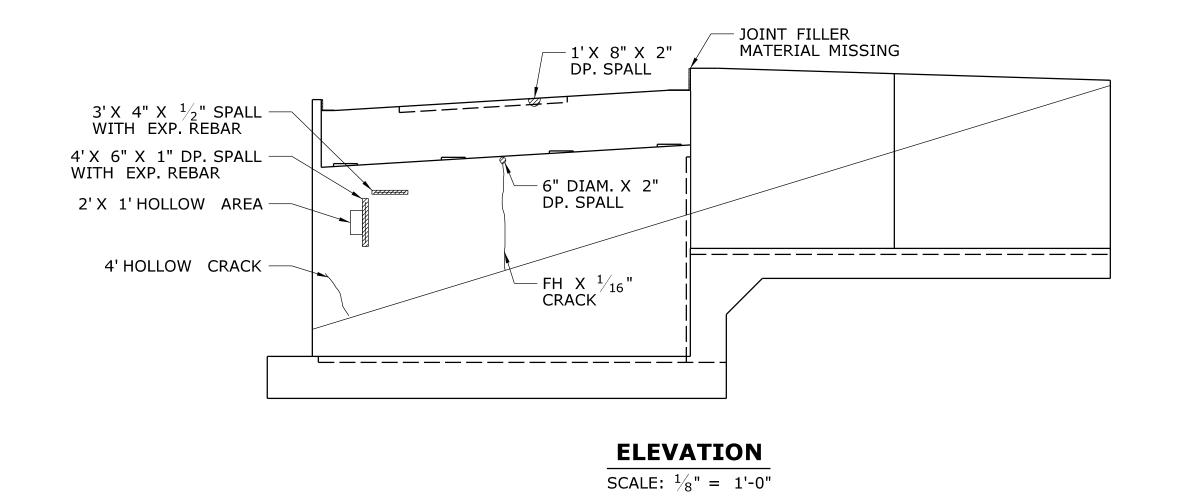
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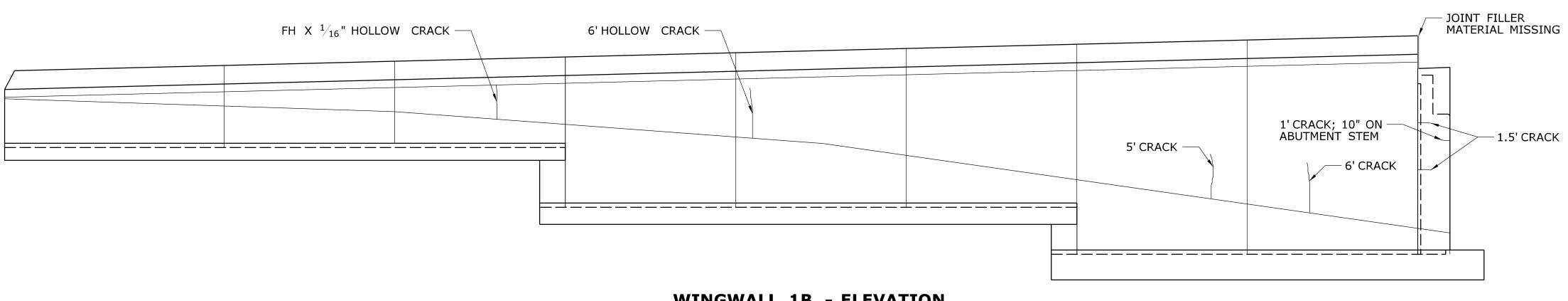
S-42

SHEET NO.

04.42

109-172





WINGWALL 1B - ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

1. SEE SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

CRACK

SPALL

HOLLOW CONCRETE

| - | - | - | _ | THE INFORMATION, INCLUDING ESTIMATED |
|------|------|----------------------|----------|--|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | _ | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
| ı | - | - | - | |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO | O. Plotted Date: 7/17/2015 |

| R/DRAFTER: | |
|------------|---|
| JRA | |
| BY: | STATE OF CONNECTICUT |
| AML | STATE OF CONNECTICUT |
| | DEPARTMENT OF TRANSPORTATION |
| | DEFARTIER OF TRANSPORTATION |
| | |
| | Filename: \S-43 03313 - ABUTMENT 1 PLAN & FLEVATION don |



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| PLAINVILLE & NEW BRITAIN | | |
|--------------------------|-------------------------|--|
| | ABUTMENT 1 ELEVATION | |

109-0172 DRAWING NO. S-43 SHEET NO. **04.43**

REFERENCE SHEET

S-83

1. CONCRETE REPAIR DETAILS - 1

- JOINT FILLER MATERIAL MISSING FULL HEIGHT −3" SHALLOW REBAR — 29" HOLLOW CRACK WITH EFFLORESCENCE

1'X 3" X UP TO 1" DP. SPALL — WITH EXPOSED REBAR FH HOLLOW CRACK — FH HOLLOW CRACK — 18" HOLLOW CRACK -9" HOLLOW CRACK - 12" HOLLOW CRACK EXTENDS 2' ONTO EAST FACE

JOINT FILLER MATERIAL MISSING 1.5' CRACK WITH -EFFLORESCENCE WINGWALL 2B - ELEVATION SCALE: $\frac{1}{4}$ " = 1'-0"

WINGWALL 2A - ELEVATION SCALE: $\frac{1}{4}$ " = 1'-0"

ELEVATION SCALE: $\frac{1}{4}$ " = 1'-0"

NOTES

1. SEE SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

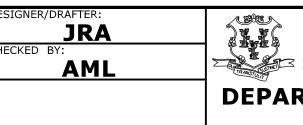
CONCRETE DETERIORATION LEGEND

CRACK

SPALL

HOLLOW CONCRETE

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED |
|------|------|----------------------|----------|---|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
| - | - | - | = | |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO | Plotted Date: 7/17/2015 |







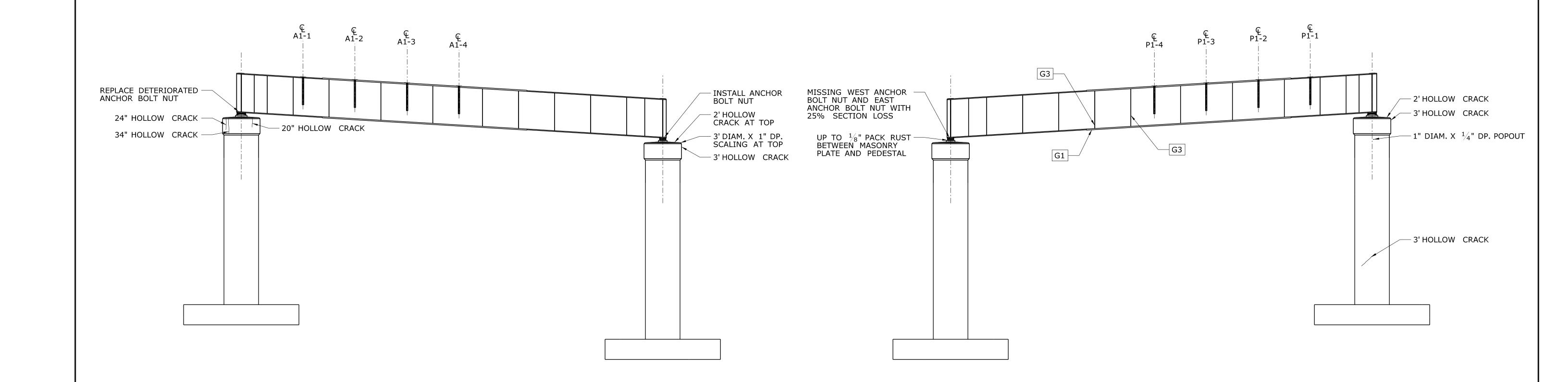
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | NVILLE & BRITAI |
|---------|---------|--------------------|
| | | |
| DRAWING | TITI F· | |

109-0172 DRAWING NO.

S-44 03313 - ABUTMENT 2 PLAN & ELEVATION SHEET NO. **04.44**





CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

- - -

- - -- - -

SPALL

HOLLOW CONCRETE

| Т | TYPE | STEEL REPAIR | REF. |
|---|------|-----------------------------|------|
| | G1 | GIRDER BOTTOM FLANGE REPAIR | S-91 |
| | G3 | GIRDER STIFFENER REPAIR | S-92 |

| | | DESIGNER/DRAFTER: |
|---|---|-------------------|
| | THE INFORMATION, INCLUDING ESTIMATED | JRA |
| | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED | CHECKED BY: |
| | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE | AML |
| | THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. | |
| 1 | | |

SHEET NO. Plotted Date: 7/17/2015

PIER 1 SOUTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"





REHABILITATION

PIER 1 NORTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

| ABILITATION OF BRIDGES | PLAINVILLE & NEW BRITAIN |
|------------------------|------------------------------------|
| 03311, 03312, 03313 | DRAWING TITLE: |
| 03320 & 03322 | 03313 - PIER 1 PLAN & ELEVATION |

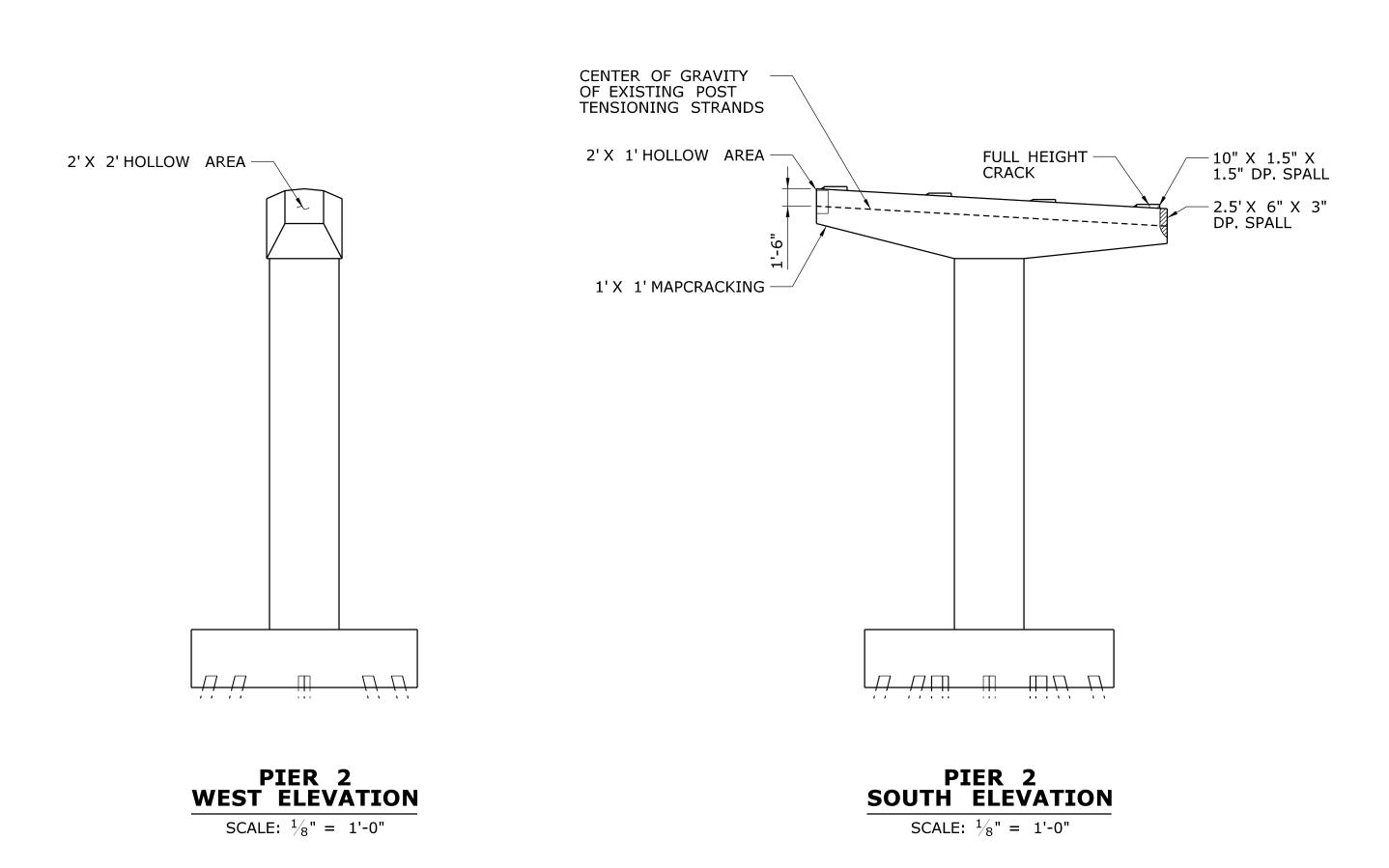
1. SEE ADDITIONAL SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

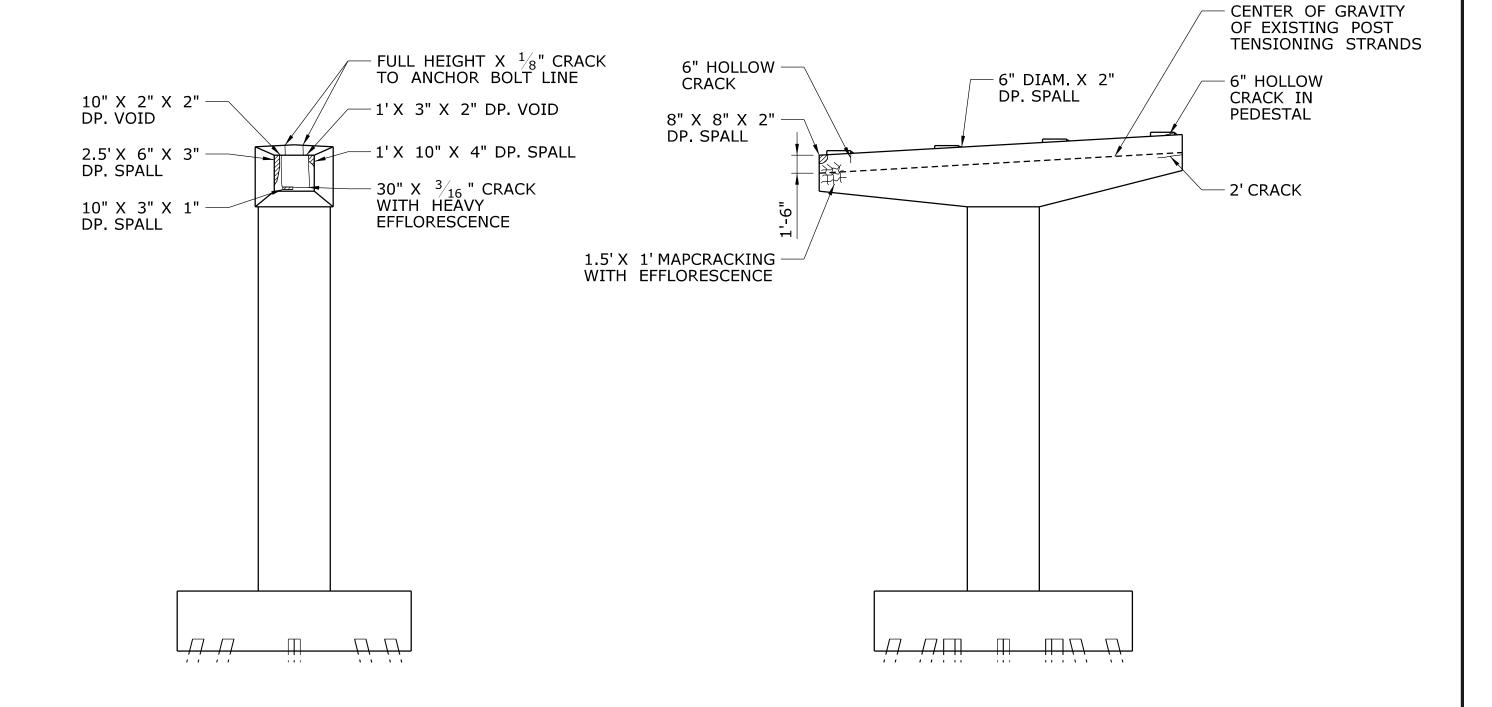
| OWN: | PLAIN NEW | | | |
|--------|--------------|---|------|---|
| RAWING | 03313 | _ | PIER | 1 |

109-0172 DRAWING NO.

S-45 SHEET NO. **04.45**







PIER 2 EAST ELEVATION SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 2 NORTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $\frac{3}{4}$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

- - - THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

SHEET NO. Plotted Date: 7/17/2015

DESIGNER/DRAFTER:

JRA

CHECKED BY:

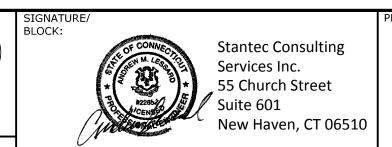
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STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-46 03313 - PIER 2 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| PLAINVILLE 8 NEW BRITAIN | _ |
|--------------------------|---|
| DRAWING TITLE: | |
| 03313 - PIER | 2 |

PLAN & ELEVATION

109-0172

DRAWING NO.

S-46

SHEET NO.

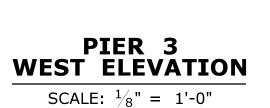
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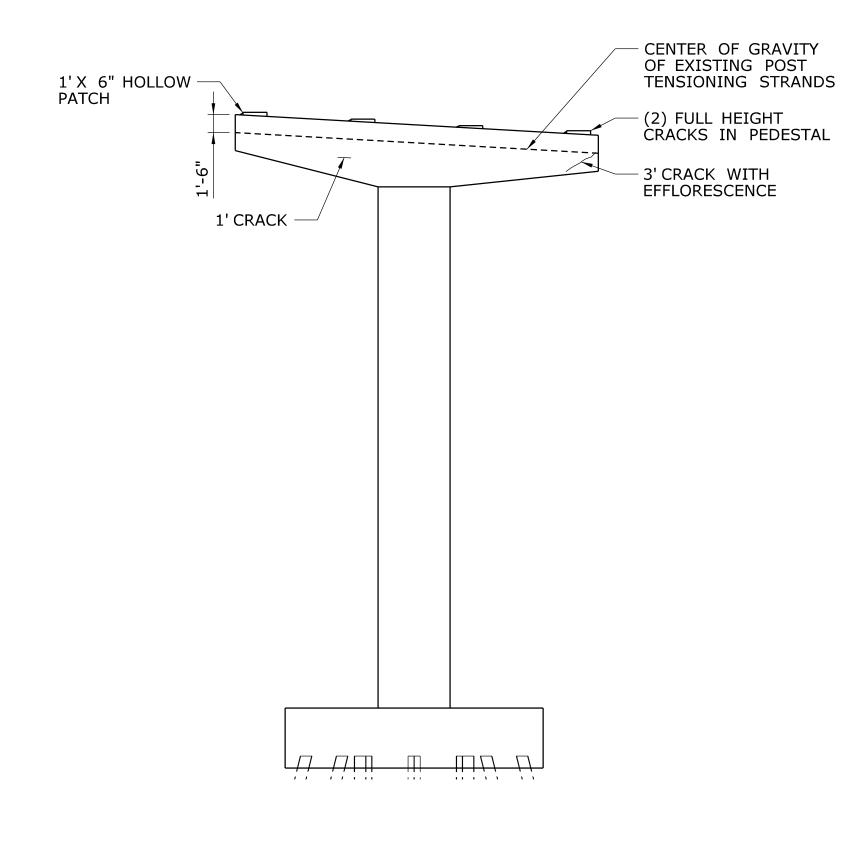
REFERENCE SHEET

S-83

1. CONCRETE REPAIR DETAILS - 1

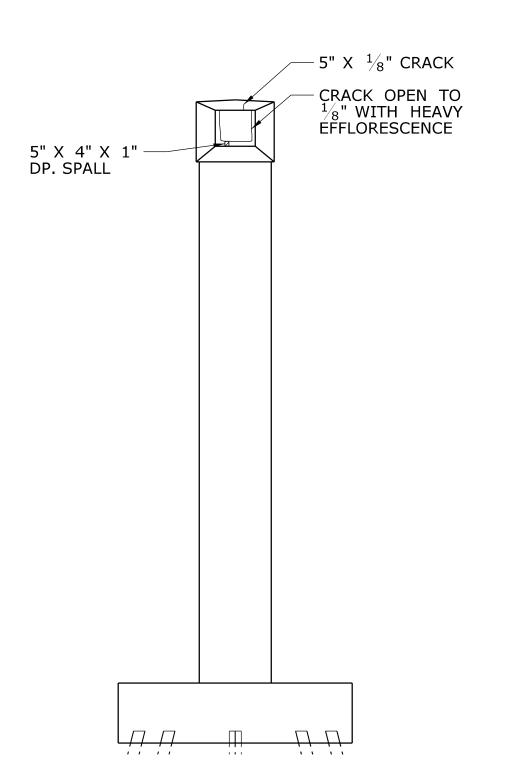
CRACKS ALONG PATCH BOUNDARY



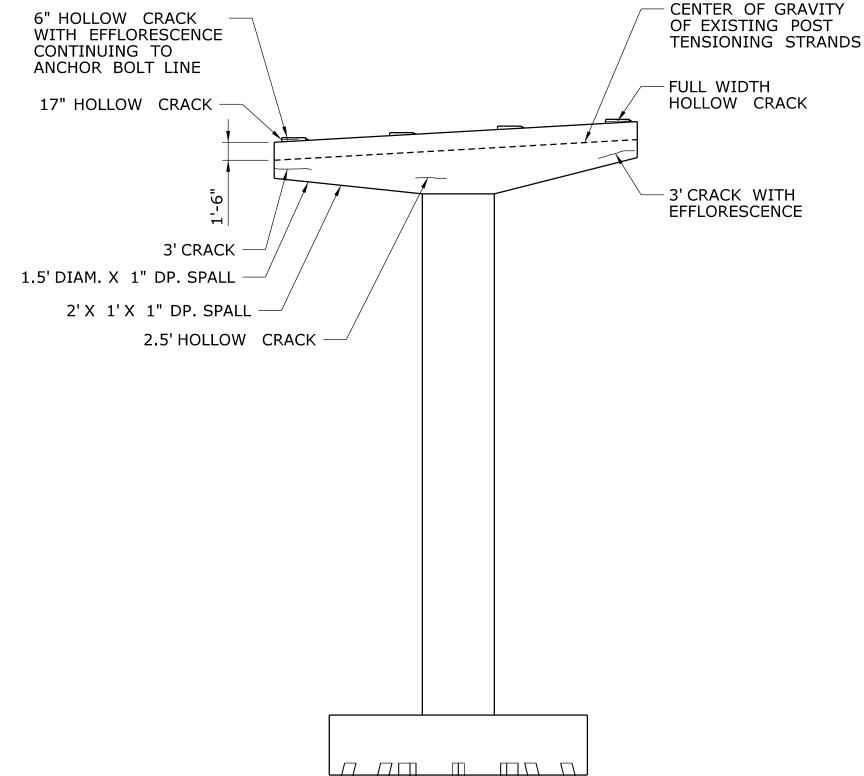


PIER 3
SOUTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"



PIER 3 EAST ELEVATION SCALE: $\frac{1}{8}$ " = 1'-0"



PIER 3 NORTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED 3/4" FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

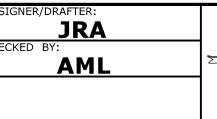
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SPALL

HOLLOW

HOLLOW CONCRETE

| - | - | - | _ | THE INFORMATION, INCLUDING ESTIMATED |
|------|------|----------------------|-----------|---|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
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| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
| - | - | - | - | |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/17/2015 |



STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-47 03313 - PIER 3 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | PL/ NE | VILLE BRIT <i>A</i> | ` |
|---------|-----------|----------------------------|---|
| DRAWING | TITLE: | | |

TAIN
DRAWING NO.
S-47
SHEET NO.
04.47

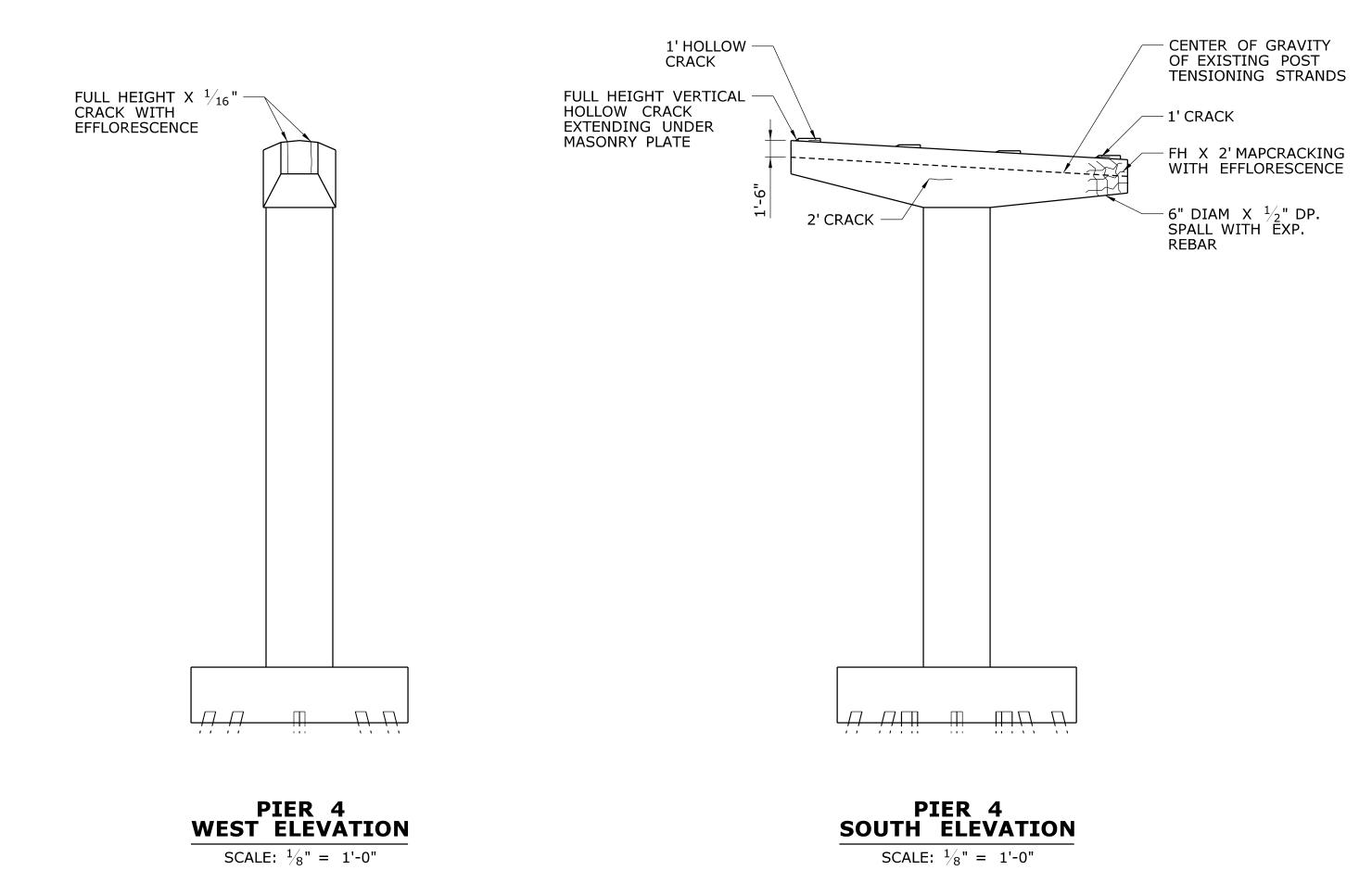
109-0172

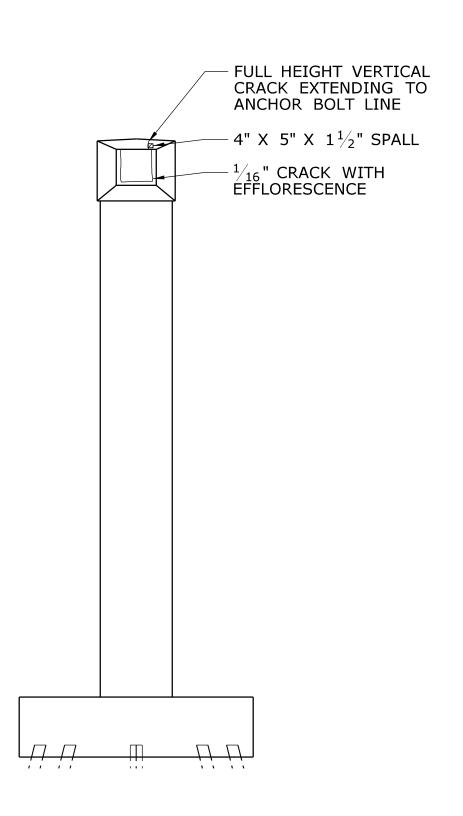
O3313 - PIER 3
PLAN & ELEVATION

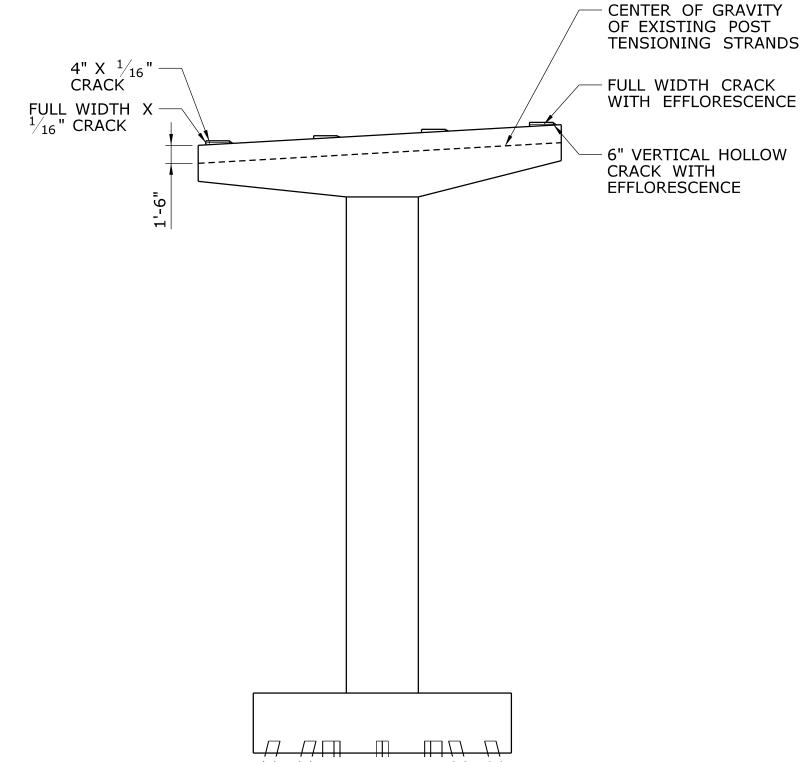
REFERENCE SHEET

S-83

1. CONCRETE REPAIR DETAILS - 1







PIER 4
EAST ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 4
NORTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $\frac{3}{4}$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

CRACK

SPALL

HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

REV. DATE

REVISION DESCRIPTION

SHEET NO. Plotted Date: 7/17/2015

DESIGNER/DRAFTER:

JRA

CHECKED BY:

AML

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-48 03313 - PIER 4 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| PLAIN NEW | IVILLE & BRITAIN |
|----------------|------------------|
| DRAWING TITLE: | |
| 00010 | DIED 4 |

109-0172
DRAWING NO.
S-48
SHEET NO

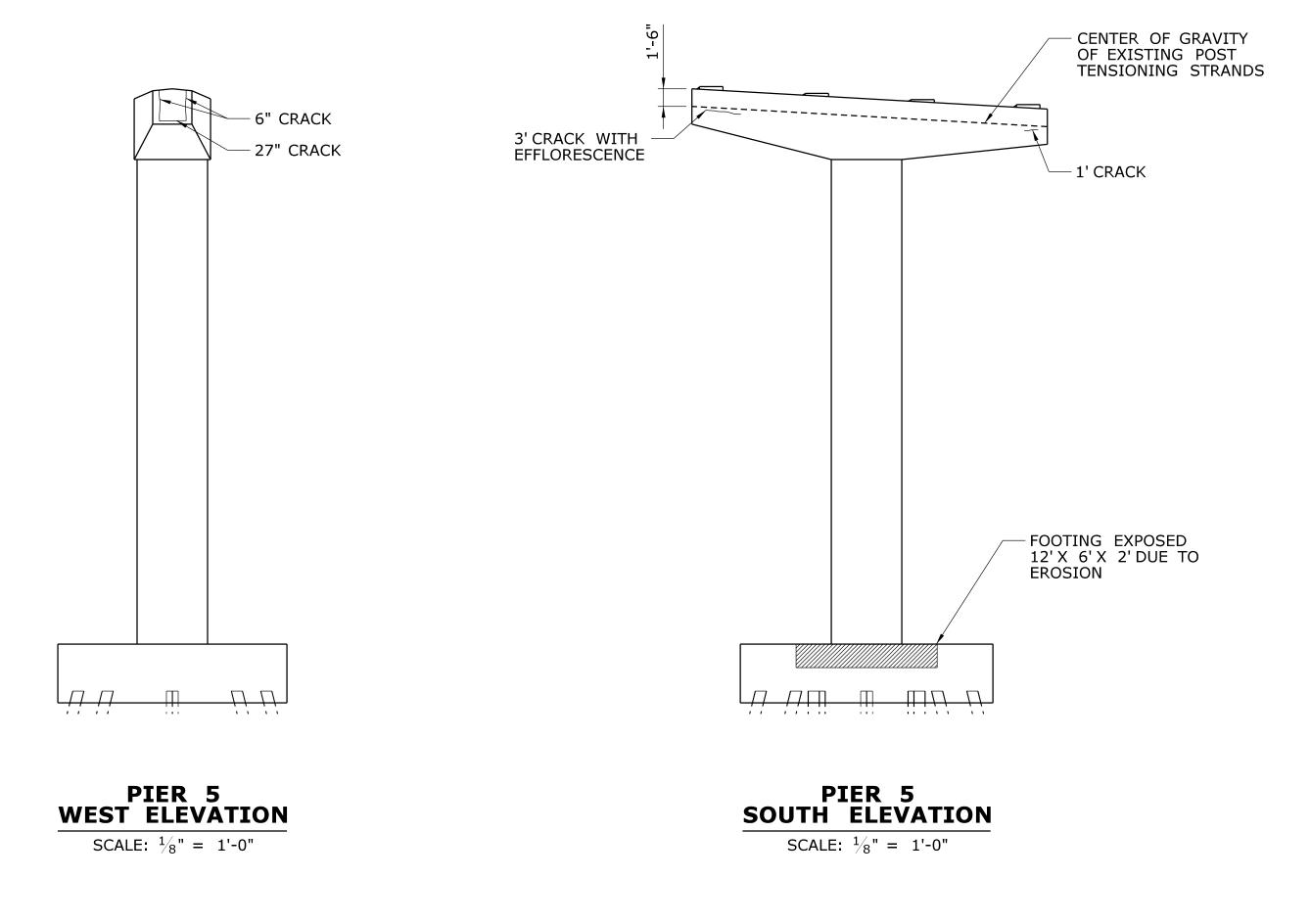
04.48

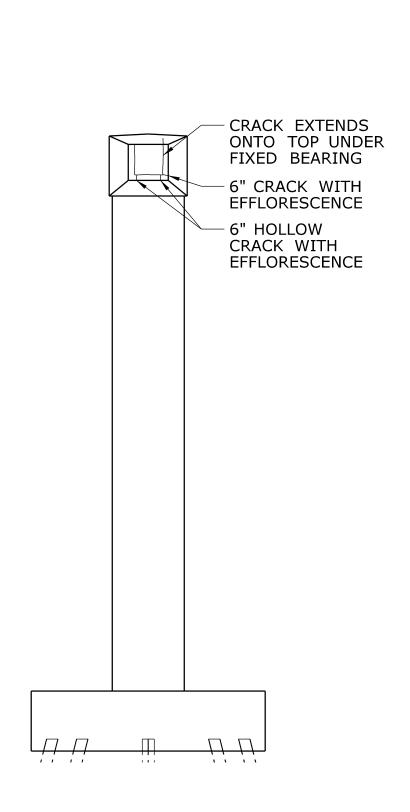
03313 - PIER 4 PLAN & ELEVATION

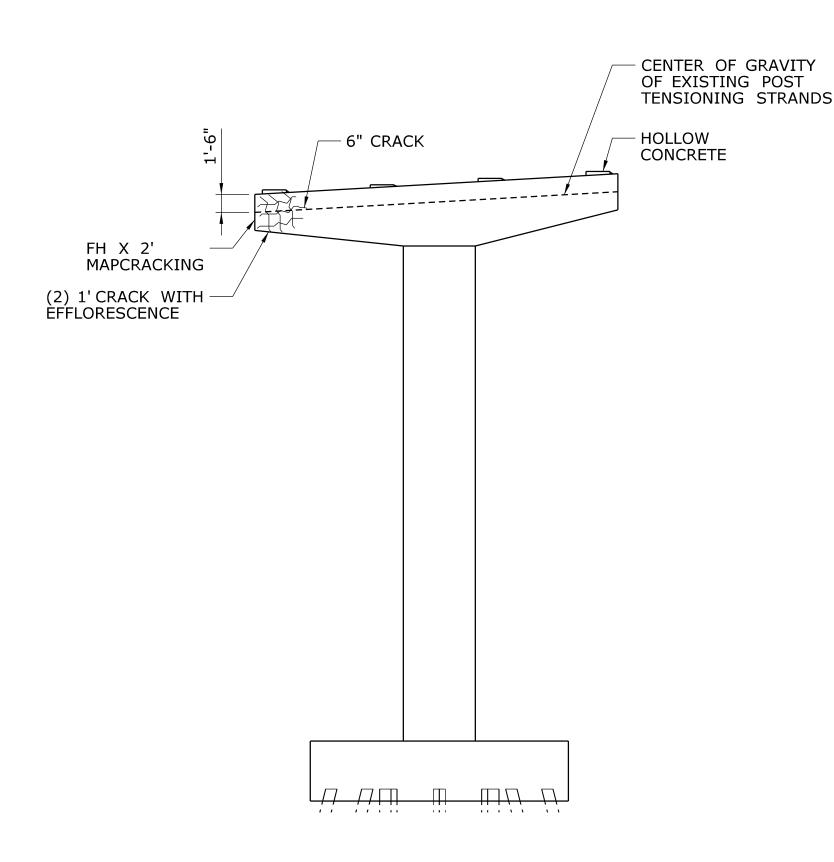


S-83

1. CONCRETE REPAIR DETAILS - 1







PIER 5 **EAST ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 5 NORTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - | - | -- | - | -_ | - | -- - -- | - | -

SHEET NO. Plotted Date: 7/17/2015

JRA **AML**

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-49 03313 - PIER 5 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | PLAIN NEW | NVILLE & BRITAIN |
|---------|--------------|---------------------|
| DRAWING | TITLE: | |
| 1 | 02212 | DIED E |

109-0172 DRAWING NO. **S-49**

04.49

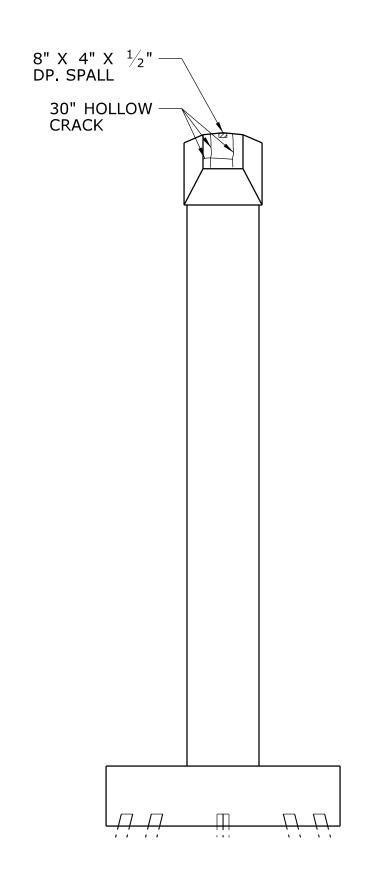
03313 - PIER 5 PLAN & ELEVATION

REFERENCE

1. CONCRETE REPAIR DETAILS - 1

SHEET

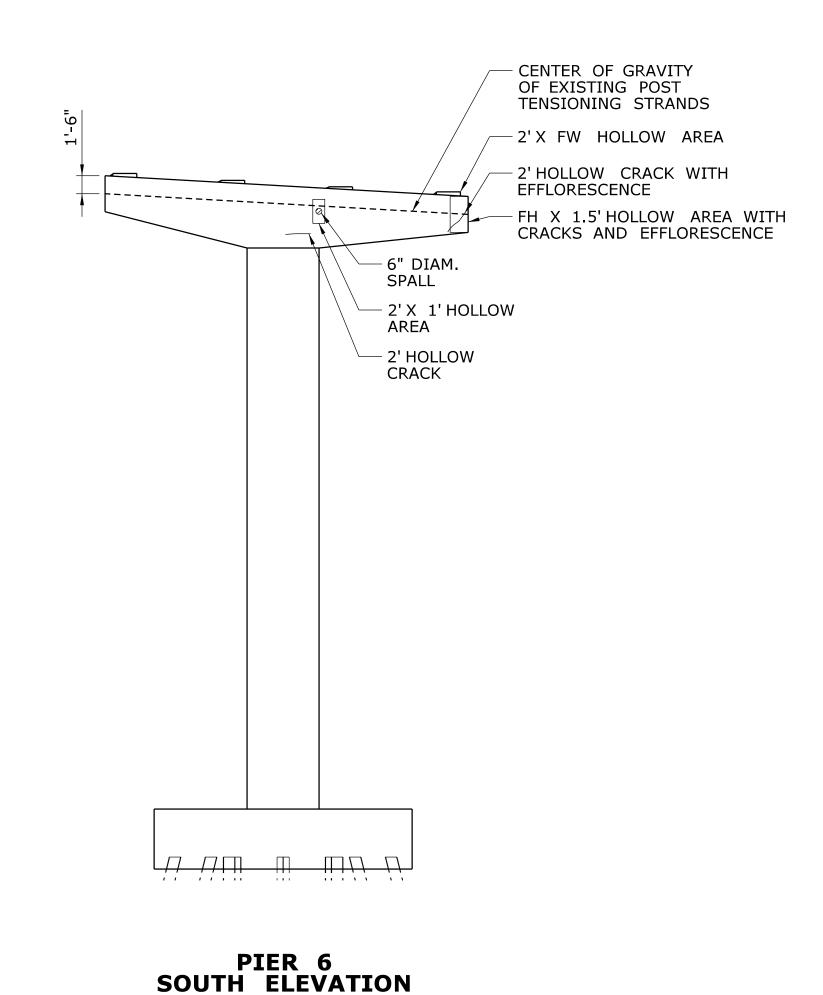
S-83

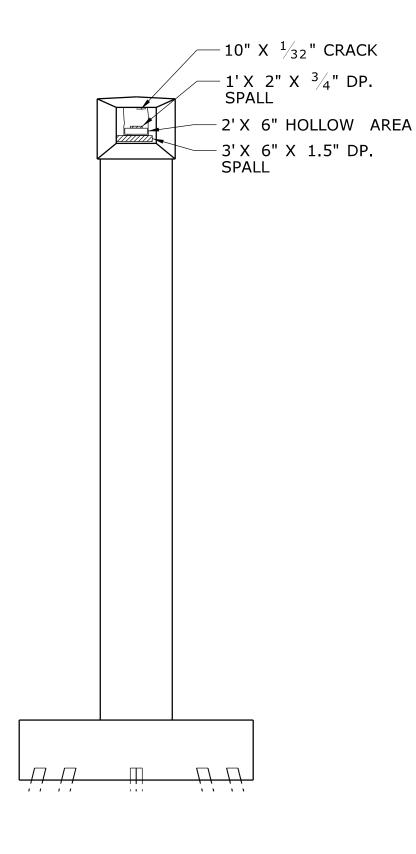


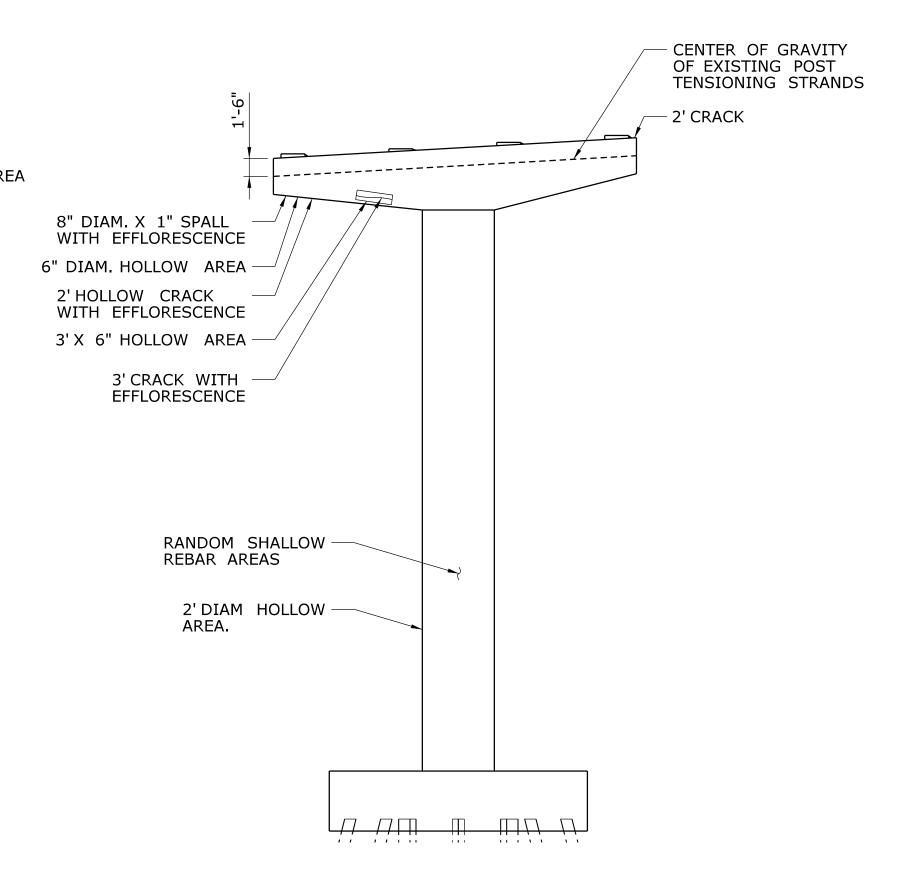
PIER 6

WEST ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"







PIER 6 **EAST ELEVATION** SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 6 NORTH ELEVATION SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - | - | -- | - | -_ | - | -- - -- | - | -

SHEET NO. Plotted Date: 7/17/2015

JRA **AML** STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION**

SCALE: $\frac{1}{8}$ " = 1'-0"



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | . == == - | VILLE BRITA | I |
|---------|---------------|----------------|---|
| DRAWING | | DIXIIA | |
| | | | _ |

109-0172 DRAWING NO. S-50 04.50

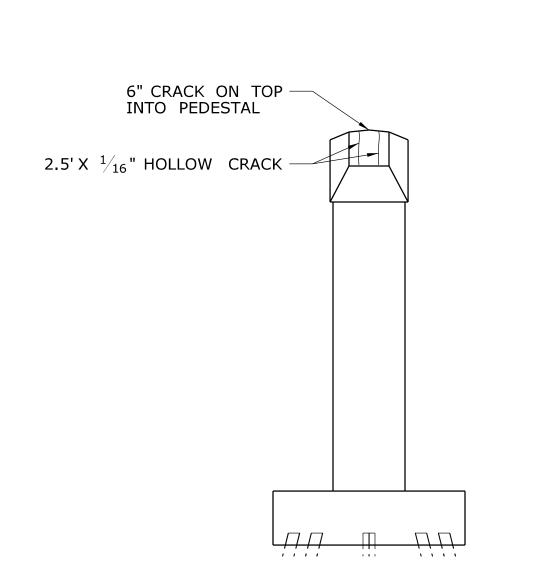
03313 - PIER 6 **PLAN & ELEVATION** Filename: ...\S-50 03313 - PIER 6 PLAN & ELEVATION.dgn

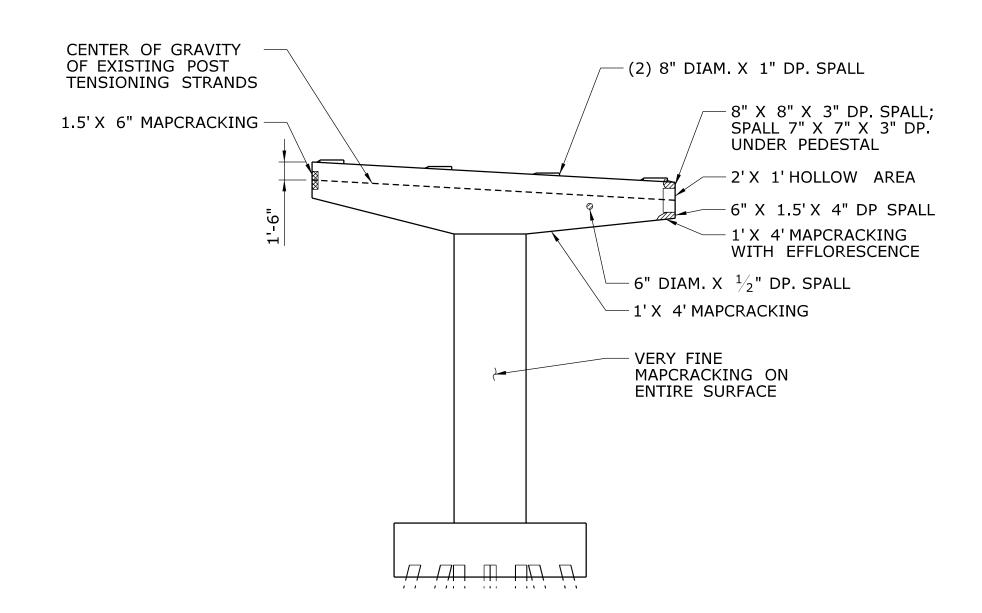
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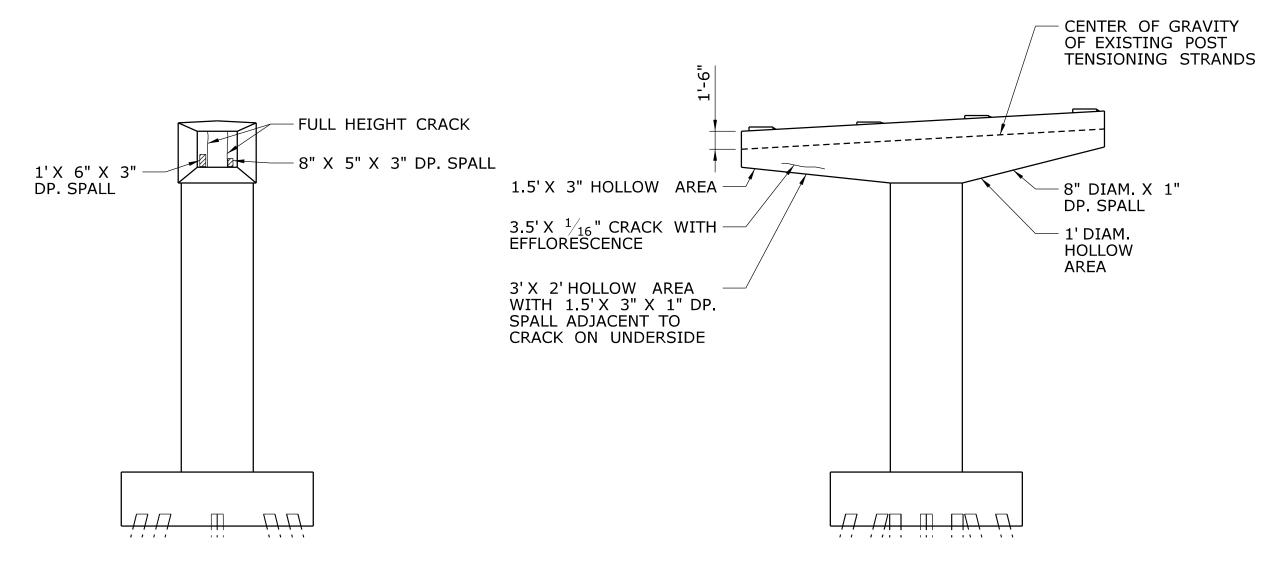
SHEET

S-83

1. CONCRETE REPAIR DETAILS - 1







NOTES

PIER 7
WEST ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

PIER 7
SOUTH ELEVATION

SCALE: \frac{1}{8}" = 1'-0"

PIER 7 EAST ELEVATION SCALE: $\frac{1}{8}$ " = 1'-0" PIER 7 NORTH ELEVATION

PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.

3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

SCALE: $\frac{1}{8}$ " = 1'-0"

1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO

2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE

SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED

SHEETS IS BASED ON LIMITED

INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE

THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

SHEET NO. Plotted Date: 7/17/2015

DESIGNER/DRAFTER:

JRA

CHECKED BY:

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AML

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-51 03313 - PIER 7 PLAN & ELEVATION.dgn



PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | PLAII NEW | NVILLE BRITA | I |
|---------|--------|--------------|-----------------|---|
| DRAWING | TITLE: | | | |

NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED.

109-0172

DRAWING NO.

S-51

SHEET NO.

04.51

O3313 - PIER 7
PLAN & ELEVATION

REFERENCE

SHEET S-83

1. CONCRETE REPAIR DETAILS - 1

CENTER OF GRAVITY

TENSIONING STRANDS

- 1' HOLLOW CRACK

1' CRACK WITH

EFFLORESCENCE

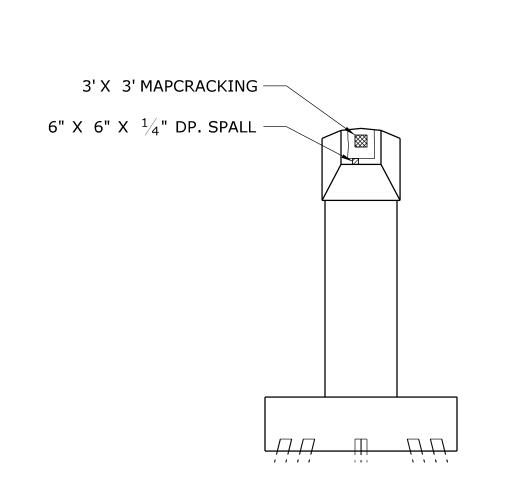
OF EXISTING POST

- 2' CRACK WITH

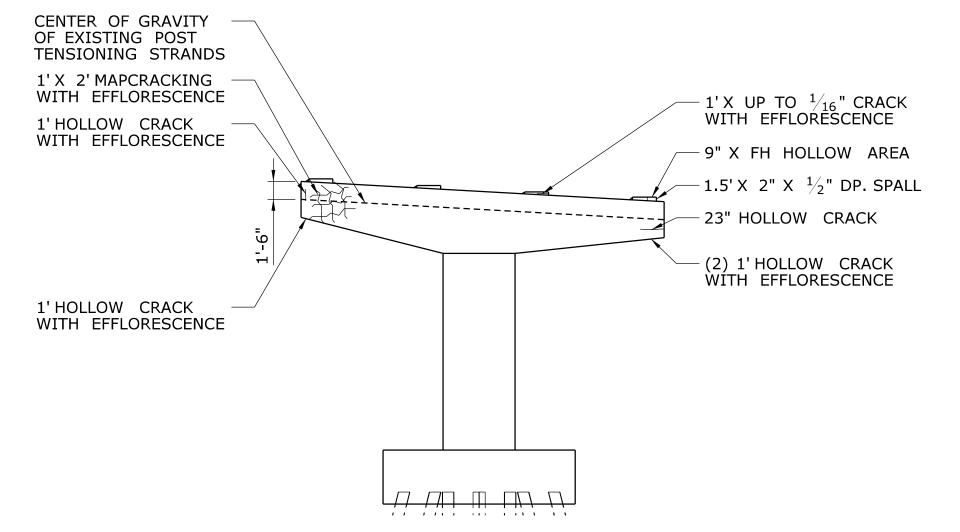
EFFLORESCENCE

- 1' HOLLOW

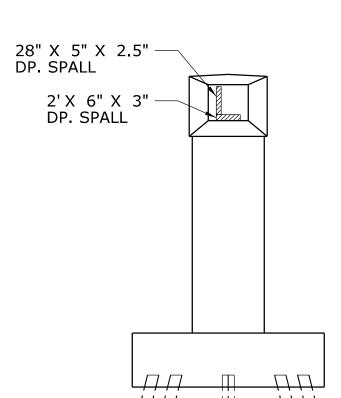
CRACK







PIER 8 SOUTH ELEVATION SCALE: $\frac{1}{8}$ " = 1'-0"



PIER 8
EAST ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.

-----*J*------

PIER 8

NORTH ELEVATION

SCALE: $\frac{1}{8}$ " = 1'-0"

- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

NOTES

1. SEE NOTES ON DWG. S-09.

CRACK SPALL HOLLOW CONCRETE

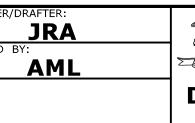
REVISION DESCRIPTION

REV. DATE

CONCRETE DETERIORATION LEGEND

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED |
|---|---|---|---|---|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
| _ | _ | _ | _ | |

SHEET NO. Plotted Date: 7/17/2015



STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-52 03313 - PIER 8 PLAN & ELEVATION.dgn



REHA 03320 & 03322

NOTES

| BILITATION OF BRIDGES | PLAIN'NEW |
|-----------------------|----------------|
| 03311, 03312, 03313 | DRAWING TITLE: |
| 02220 0 02222 | 03313 |

FULL HEIGHT HOLLOW CRACK -

FULL WIDTH HOLLOW CRACK —

2' HOLLOW CRACK

WITH EFFLORESCENCE

1' X 1' HOLLOW — AREA

THRU BOLT LINE AT PEDESTAL

WITH EFFLORESCENCE

2' HOLLOW CRACK

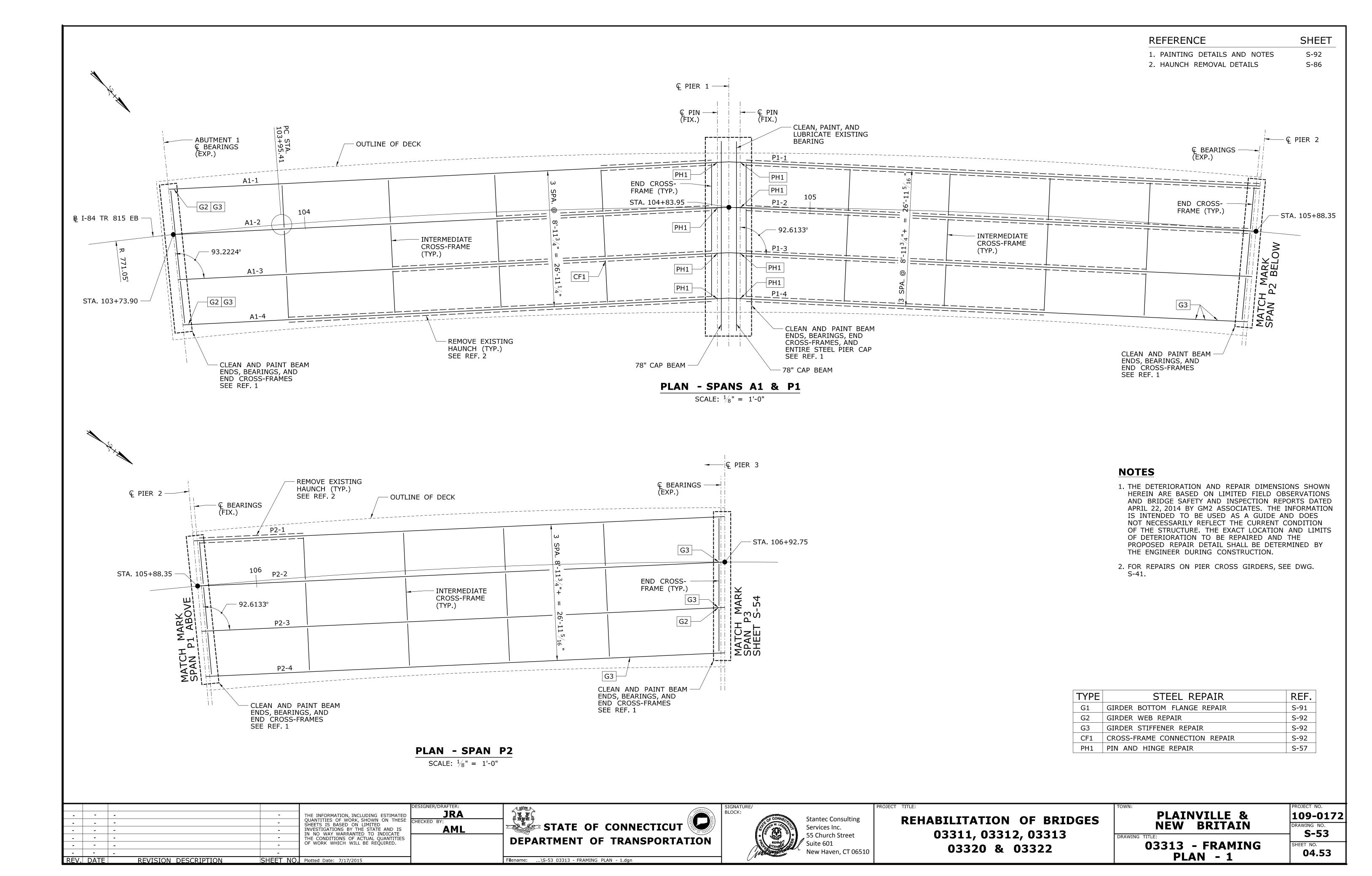
| | NVILLE & BRITAIN |
|----------------|------------------|
| DRAWING TITLE: | |
| 02242 | DIED |

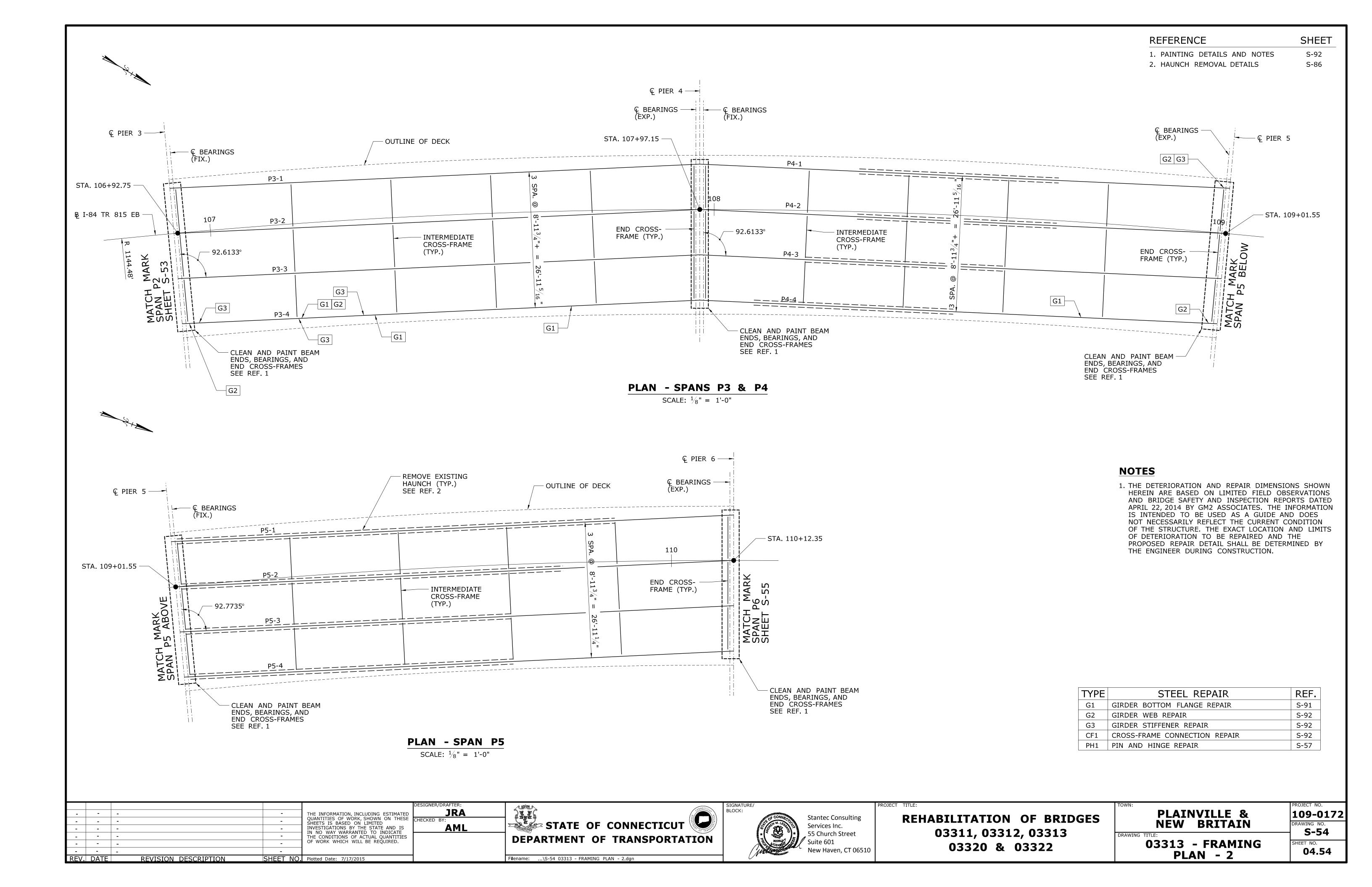
03313 - PIER 8 **PLAN & ELEVATION**

S-52 04.52

109-0172

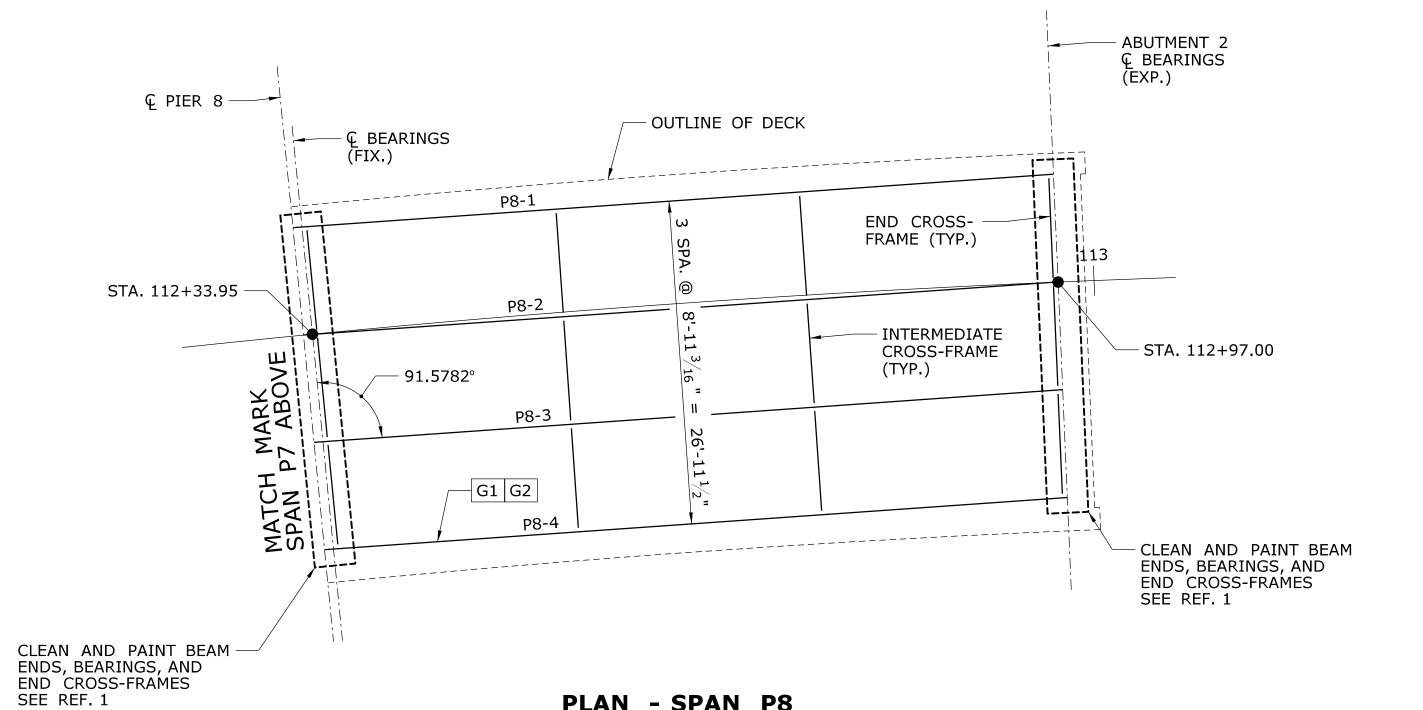
DRAWING NO.





REFERENCE SHEET 1. PAINTING DETAILS AND NOTES S-92 2. HAUNCH REMOVAL DETAILS S-86 © PIER 7 ─► - CLEAN AND PAINT GIRDER P7-1 IN ITS ENTIRETY € BEARINGS © PIER 8-SEE REF. 1 (EXP.) (FIX.) € BEARINGS - REMOVE EXISTING Ç PIER 6 ─── G3 (EXP.) - G3 HAUNCH (TYP.) OUTLINE OF DECK SEE REF. 2 € BEARINGS STA. 112+33.95 — P6-1 STA. 111+23.15 STA. 110+12.35 -CF1 P7-2 В I-84 TR 815-P6-2 END CROSS-FRAME (TYP.) - INTERMEDIATE - 92.7735° INTERMEDIATE CF1 CROSS-FRAME CROSS-FRAME (TYP.) END CROSS-– 92.7735° (TYP.) FRAME (TYP.) P6-3 **G**3 _G1 P7-4 G3 G2 G1 CLEAN AND PAINT BEAM ENDS, BEARINGS, AND END CROSS-FRAMES SEE REF. 1 CLEAN AND PAINT BEAM -ENDS, BEARINGS, AND END CROSS-FRAMES SEE REF. 1 CLEAN AND PAINT BEAM ENDS, BEARINGS, AND END CROSS-FRAMES SEE REF. 1 PLAN - SPANS P6 & P7

SCALE: $\frac{1}{8}$ " = 1'-0"



PLAN - SPAN P8

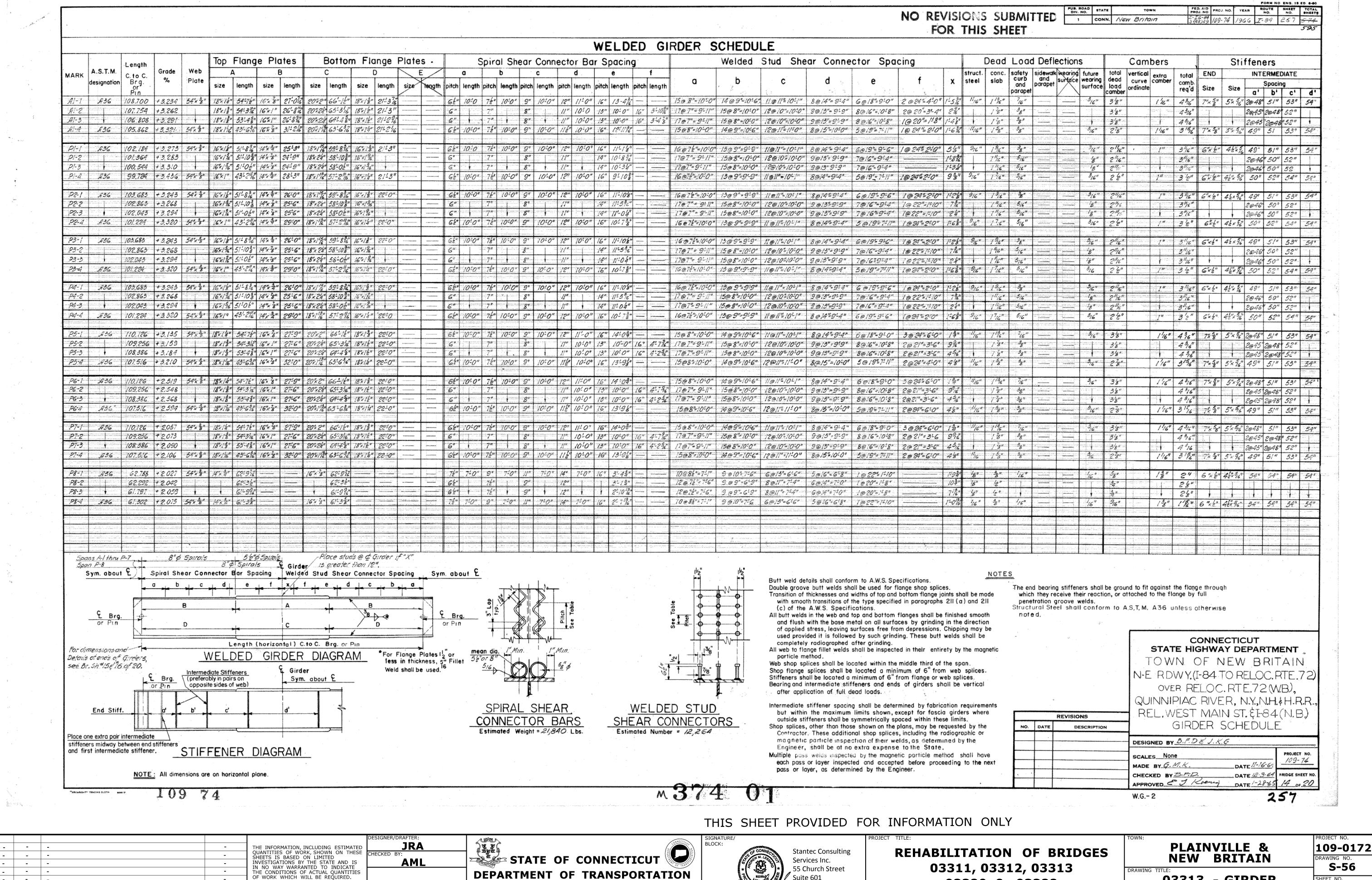
SCALE: $\frac{1}{8}$ " = 1'-0"

NOTES

1. THE DETERIORATION AND REPAIR DIMENSIONS SHOWN HEREIN ARE BASED ON LIMITED FIELD OBSERVATIONS AND BRIDGE SAFETY AND INSPECTION REPORTS DATED APRIL 22, 2014 BY GM2 ASSOCIATES. THE INFORMATION IS INTENDED TO BE USED AS A GUIDE AND DOES NOT NECESSARILY REFLECT THE CURRENT CONDITION OF THE STRUCTURE. THE EXACT LOCATION AND LIMITS OF DETERIORATION TO BE REPAIRED AND THE PROPOSED REPAIR DETAIL SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

| TYPE | STEEL REPAIR | REF. |
|------|-------------------------------|------|
| G1 | GIRDER BOTTOM FLANGE REPAIR | S-91 |
| G2 | GIRDER WEB REPAIR | S-92 |
| G3 | GIRDER STIFFENER REPAIR | S-92 |
| CF1 | CROSS-FRAME CONNECTION REPAIR | S-92 |
| PH1 | PIN AND HINGE REPAIR | S-57 |

| | | DESIGNER/DRA | RAFTER: | SIGNATURE/ | PROJECT TITLE: | TOWN: | PROJECT NO. |
|-----------|-------------------------------|--|--|----------------------------|----------------------------|-----------------|-------------|
| | - | THE INFORMATION, INCLUDING ESTIMATED | JRA SECTION OF THE SE | BLOCK: Stantec Consulting | DELIABILITATION OF BRIDGES | PLAINVILLE & | 109-017 |
| - - - | - | SHEETS IS BASED ON LIMITED CHECKED BY: | Y: | | REHABILITATION OF BRIDGES | NEW BRITAIN | DRAWING NO. |
| | - | INVESTIGATIONS BY THE STATE AND IS | AML STATE OF CONNECTICUT | Services Inc. | 02211 02212 02212 | MEAN DELIMIN | S-55 |
| | - | THE CONDITIONS OF ACTUAL QUANTITIES | DEPARTMENT OF TRANSPORTATION | TTON 55 Church Street | 03311, 03312, 03313 | DRAWING TITLE: | 3-33 |
| | - | OF WORK WHICH WILL BE REQUIRED. | DEPARTMENT OF TRANSPORTA | CENST | 03320 & 03322 | 03313 - FRAMING | SHEET NO. |
| | - | | | New Haven, CT 06 | 5510 USSZU & USSZZ | | 04.55 |
| REV DATE | REVISION DESCRIPTION SHEET NO | Plotted Date: 7/17/2015 | Filename:\S-55 03313 - FRAMING PLAN - 3.dgn | | | PLAN - 3 | |



DEPARTMENT OF TRANSPORTATION

Filename: ...\S-56 03313 - GIRDER SCHEDULE.dgn

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REVISION DESCRIPTION

SHEET NO. Plotted Date: 7/17/2015

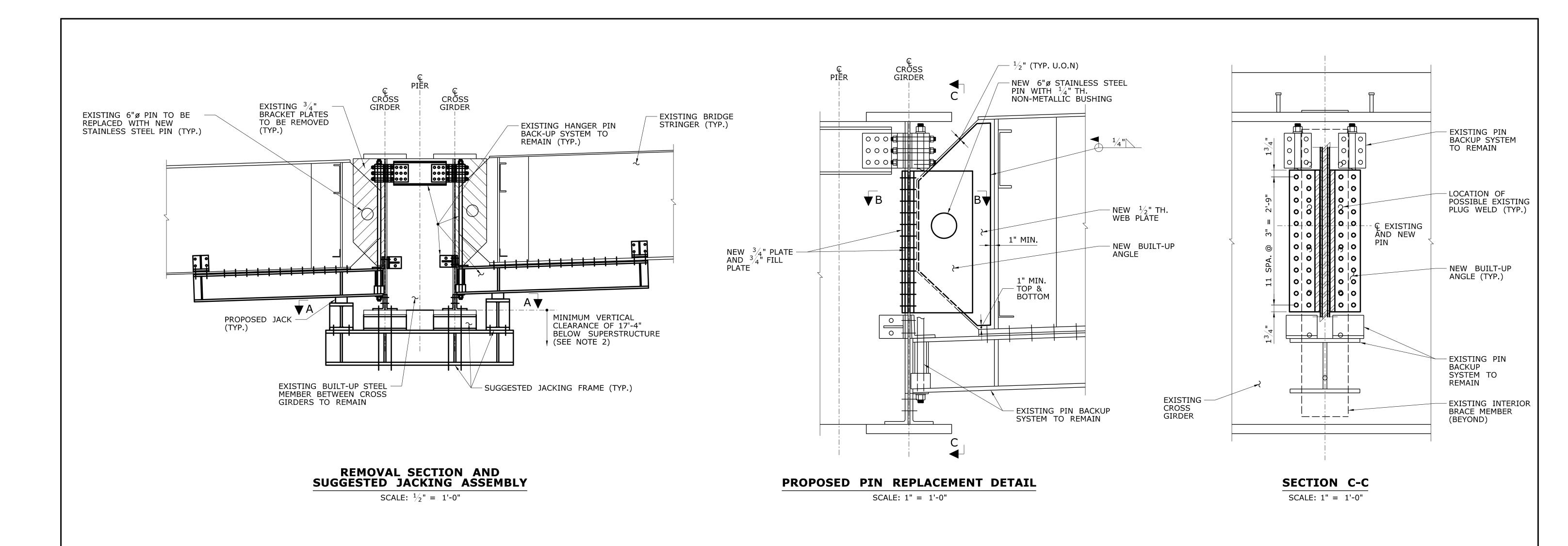
REV. DATE

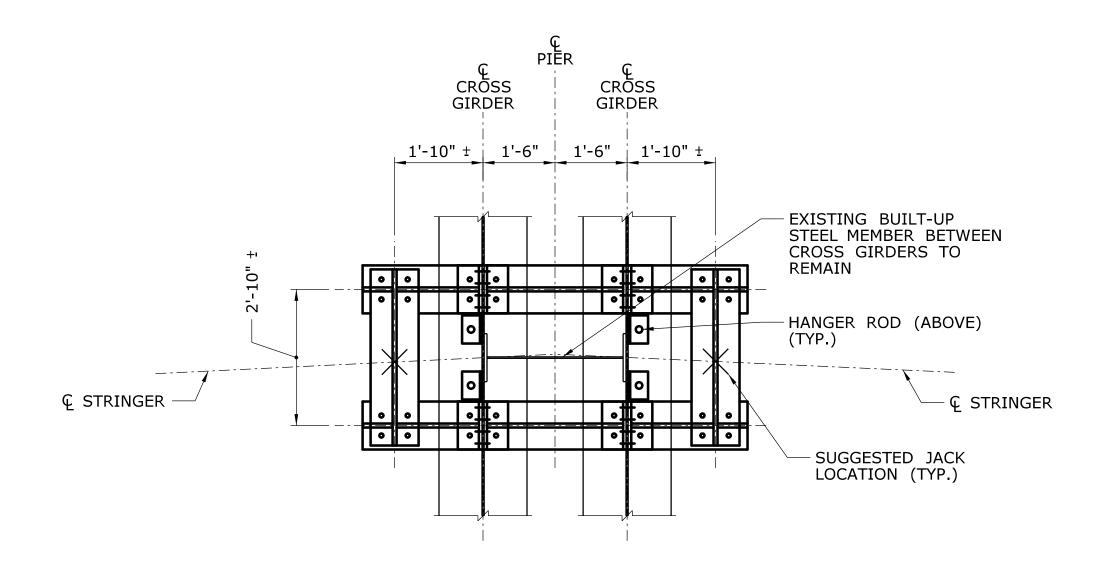
03313 - GIRDER SCHEDULE

04.56

03320 & 03322

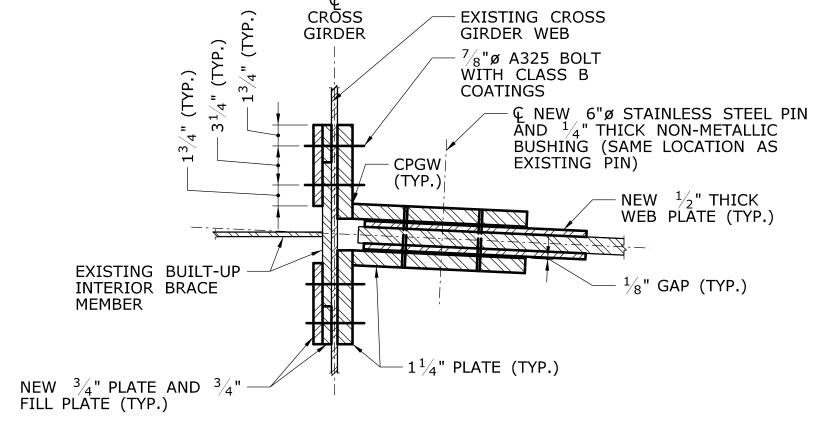
New Haven, CT 06510





SECTION A-A

SCALE: $\frac{1}{2}$ " = 1'-0"



VERTICAL CLEARANCE CAN BE MET PRIOR TO FABRICATION OF THE JACKING SYSTEM OR THAT THE FRAME CAN BE INSTALLED WITH LANE CLOSURES.

NOTES

JACKING OF GIRDERS FOR PURPOSE OF REPLACING PINS AND BRACKET PLATES SHALL BE PAID FOR UNDER THE ITEM "TEMPORARY SUPPORT ASSEMBLY".

3. PROPOSED PIN SHALL BE STAINLESS STEEL AND HAVE A MINIMUM Fy=50 KSI.

1. THE JACKING FRAME AS SHOWN ON THIS DRAWING IS SUGGESTED.

5. JACKING FRAME USED FOR REPLACING BRIDGE PINS AND BRACKET PLATES SHALL BE PAID FOR UNDER THE ITEM "TEMPORARY SUPPORT ASSEMBLY".

CONTRACTOR SHALL PROVIDE THE DESIGN FOR THE JACKING SYSTEM USED. DRAWINGS AND CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER

2. PER THE INSPECTION REPORT BY GM2 ASSOCIATES, INC. DATED APRIL 22, 2014,

LICENSED IN THE STATE OF CONNECTICUT SHALL BE SUBMITTED FOR APPROVAL

THE MINIMUM VERTICAL CLEARANCE AT PIER 1 BELOW THE SUPERSTRUCTURE IS

JACKING FRAME IS 16'-0". THE CONTRACTOR SHALL VERIFY THAT THIS MINIMUM

17'-4". THE MINIMUM VERTICAL CLEARANCE ALLOWED BELOW THE SUGGESTED

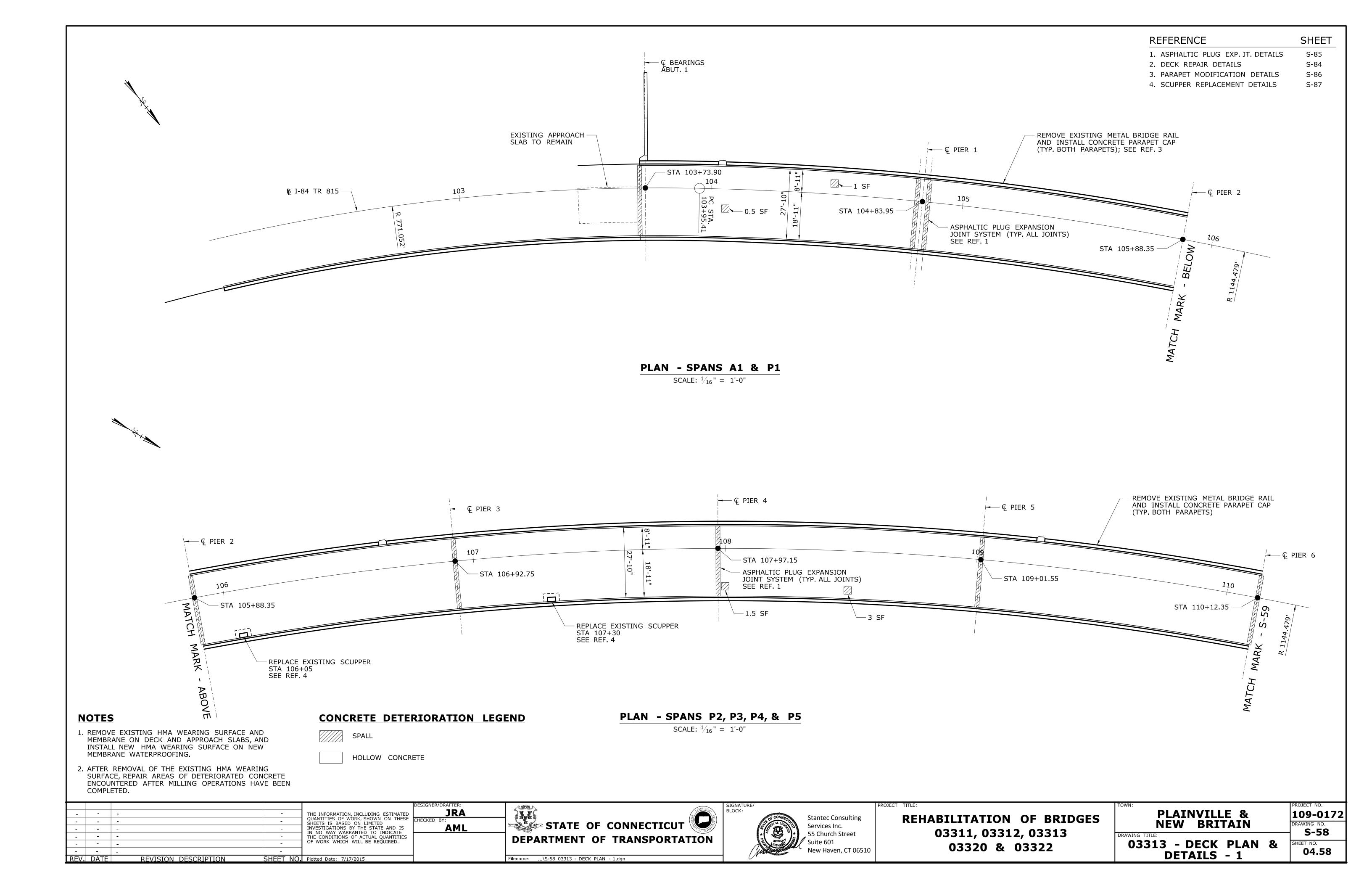
SECTION B-B SCALE: $1\frac{1}{2}$ " = 1'-0"

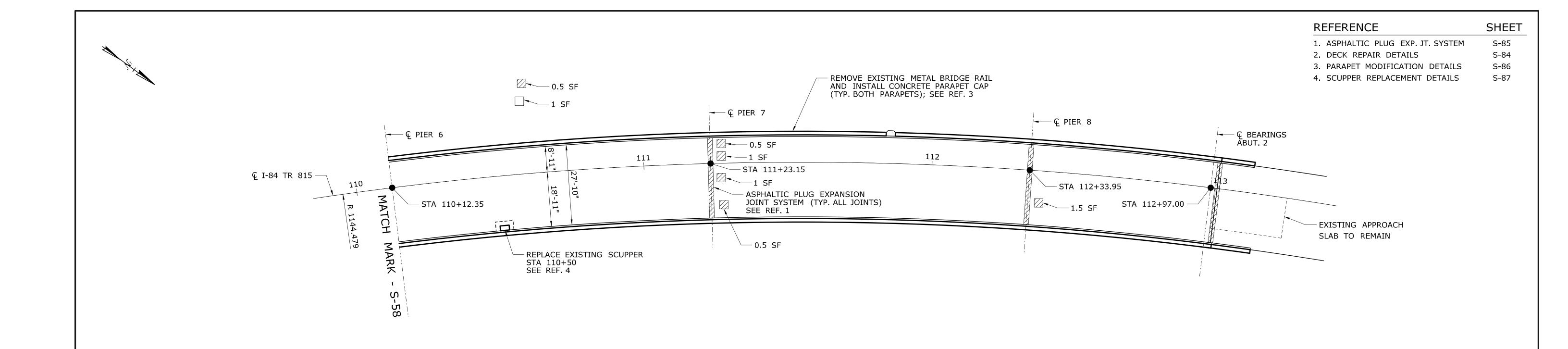
Stantec Consulting Services Inc. 55 Church Street Suite 601 New Haven, CT 06510

PLAINVILLE & **NEW BRITAIN**

DRAWING NO. S-57 SHEET NO. 04.57

STATE OF CONNECTICUT JRA BLOCK: THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. 109-0172 REHABILITATION OF BRIDGES - | -**AML** - | - | -03311, 03312, 03313 DRAWING TITLE: _ | - | -**DEPARTMENT OF TRANSPORTATION** 03313 - PIN - - -03320 & 03322 REPLACEMENT DETAILS - | - | -REVISION DESCRIPTION Filename: ...\S-57 03313 - PIN REPLACEMENT DETAILS.dgn REV. DATE SHEET NO. Plotted Date: 7/17/2015





PLAN - SPANS P6, P7 & P8

SCALE: $\frac{1}{16}$ " = 1'-0"

NOTES

- 1. REMOVE EXISTING HMA WEARING SURFACE AND MEMBRANE ON DECK AND APPROACH SLABS, AND INSTALL NEW HMA WEARING SURFACE ON NEW MEMBRANE WATERPROOFING.
- 2. AFTER REMOVAL OF THE EXISTING HMA WEARING SURFACE, REPAIR AREAS OF DETERIORATED CONCRETE ENCOUNTERED AFTER MILLING OPERATIONS HAVE BEEN COMPLETED.

CONCRETE DETERIORATION LEGEND

SPALL

HOLLOW CONCRETE

| - | _ | - | _ | THE INFORMATION, INCLUDING ESTIMATED |
|------|------|----------------------|-----------|---|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
| - | - | - | - | |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/17/2015 |

| JRA | CONNECTION |
|-----------------|------------------------------|
| HECKED BY: AML | STATE OF CONNECTICUT |
| | DEPARTMENT OF TRANSPORTATION |

Filename: ...\S-59 03313 - DECK PLAN - 2.dgn

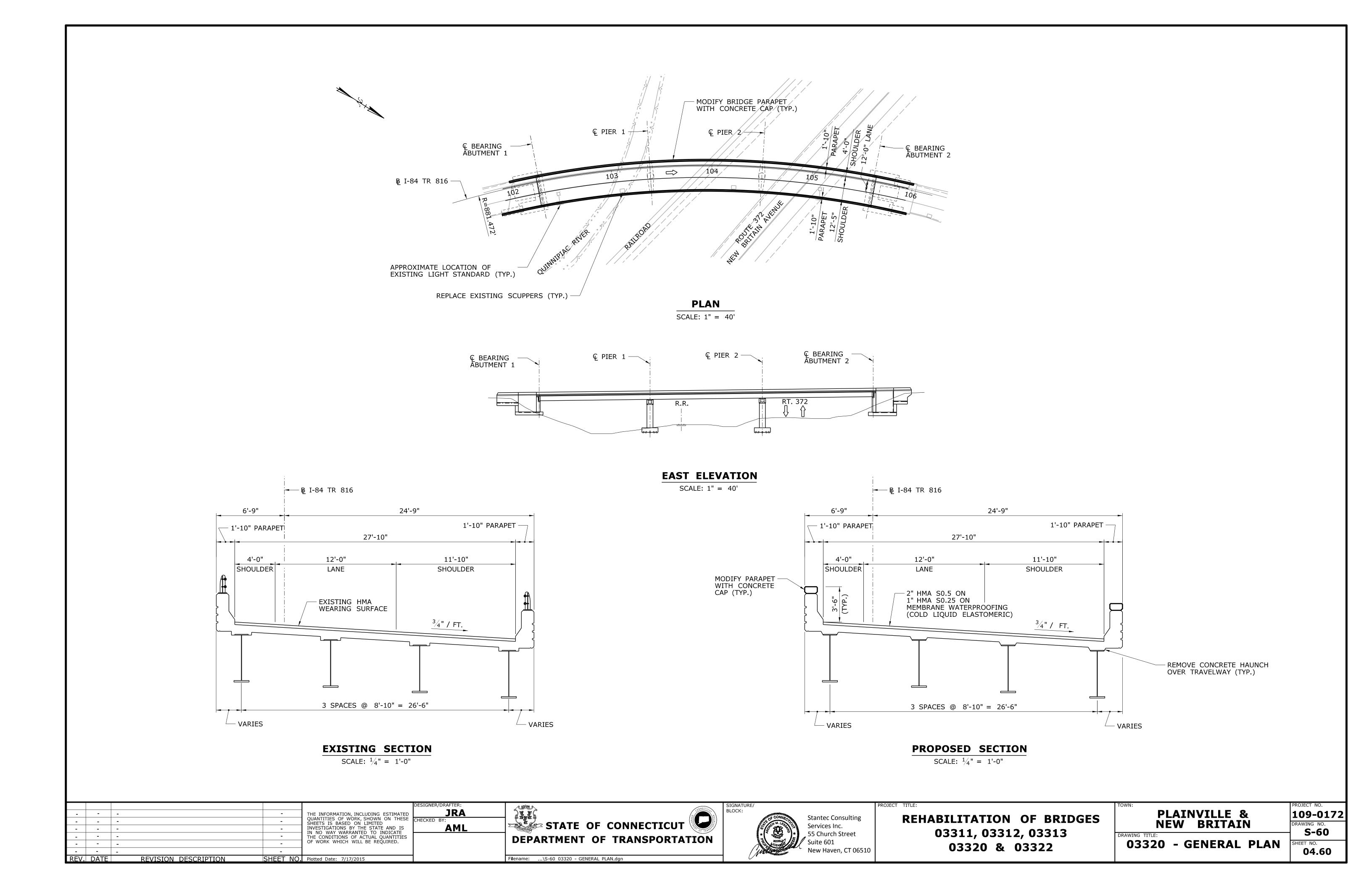


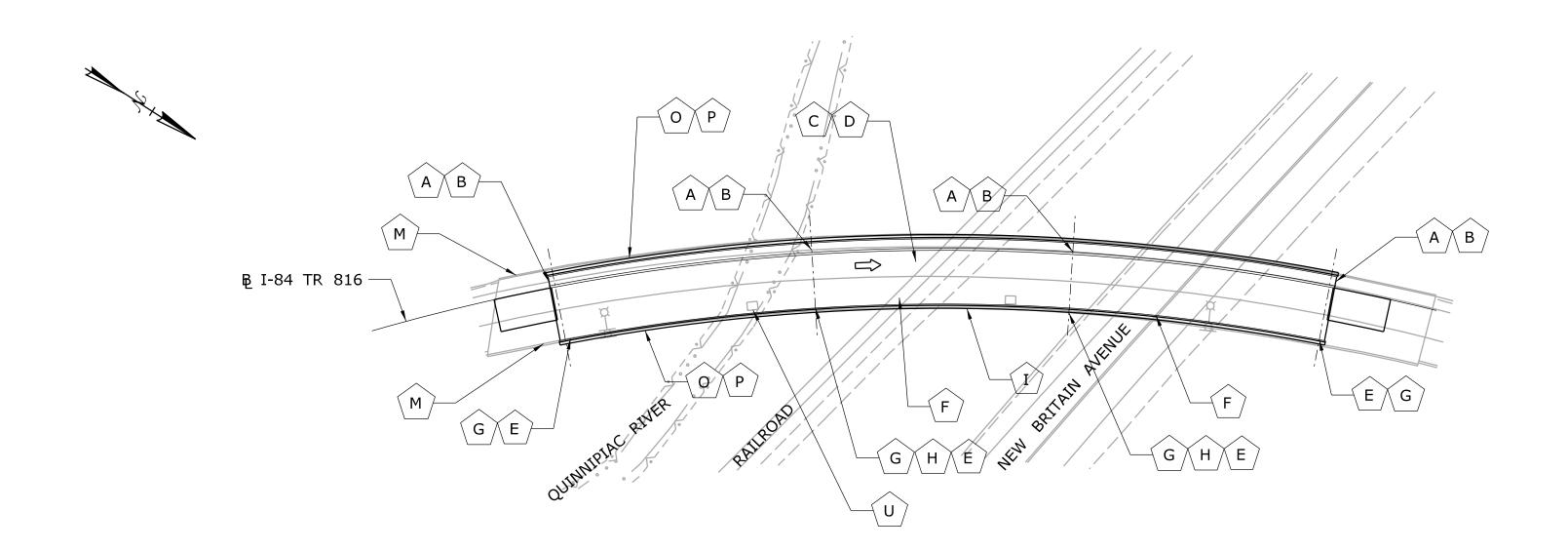
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | NVILLE & BRITAIN |
|---------|--------|------------------|
| DRAWING | TITLE: | |

03313 - DECK PLAN & **DETAILS - 2**

109-0172 S-59 04.59





PLAN

SCALE: 1" = 40'

| | SCOPE OF WORK LEGEND | | | | |
|---------------|---|--|--|--|--|
| DEGICAL TRANS | | | | | |
| DESIGNATION | DESCRIPTION OF WORK | | | | |
| Α | REPLACE JOINTS AT ABUTMENTS AND PIERS | | | | |
| В | REPAIR DECK ENDS AT EACH JOINT AS REQUIRED | | | | |
| С | MILL DECK, FULL AND PARTIAL DEPTH DECK PATCH | | | | |
| D | PLACE NEW MEMBRANE WATERPROOFING AND BITUMINOUS OVERLAY OVER ENTIRE DECK | | | | |
| E | CLEAN AND PAINT BEAM ENDS, BEARING DEVICES AND OTHER AREAS AS NEEDED | | | | |
| F | REMOVE HAUNCHES OVER ROADWAY AND RAILROAD | | | | |
| G | REPAIR SUBSTRUCTURE AS NECESSARY | | | | |
| Н | REPAIR POST-TENSIONING ANCHORAGE AT PIER CAPS; PROVIDE TEMPORARY SUPPORT OF PIER CAPS | | | | |
| I | REPAIR SUPERSTRUCTURE AS NECESSARY | | | | |
| 0 | MODIFY BRIDGE PARAPET WITH CONCRETE CAP | | | | |
| Р | REPAIR PARAPETS AS REQUIRED (FULL LENGTH) | | | | |
| U | REPLACE EXISTING SCUPPERS | | | | |

| | | | | | DESI |
|---|---|---|---|---|------|
| - | - | - | - | SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES | |
| - | - | - | - | | CHEC |
| - | - | - | - | | |
| - | - | - | - | | |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. | |
| _ | _ | - | _ | | |

SHEET NO. Plotted Date: 7/17/2015

REVISION DESCRIPTION

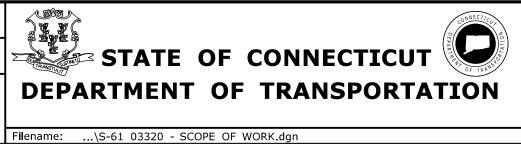
REV. DATE

DESIGNER/DRAFTER:

JRA

CHECKED BY:

AML





PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| , v i v . | | VILLI BRIT | |
|-----------|--------|-------------------|--|
| AWING | TITLE: | | |

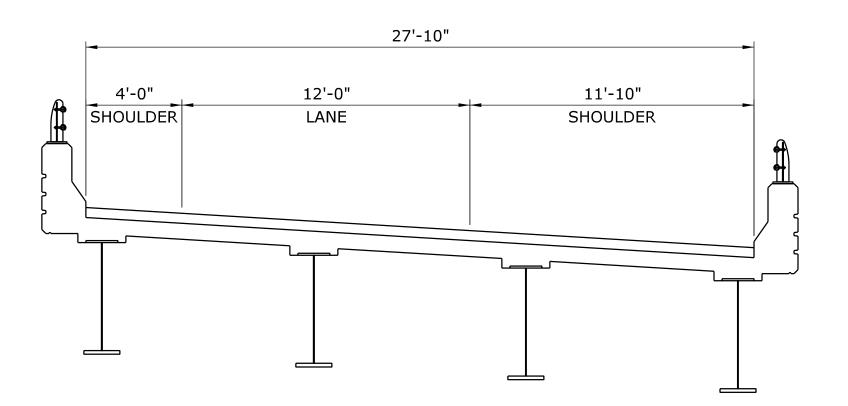
DRAWING TITLE:

O3320 - SCOPE OF WORK

SHEET NO.

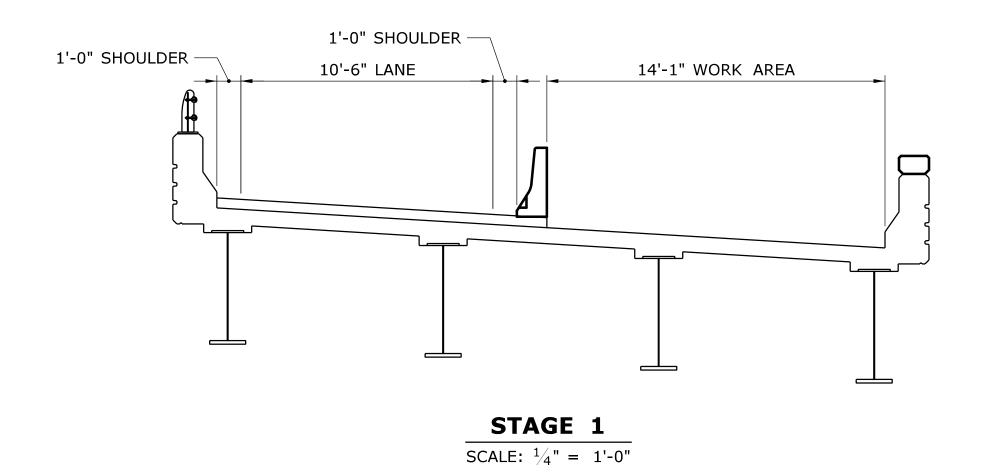
04.61

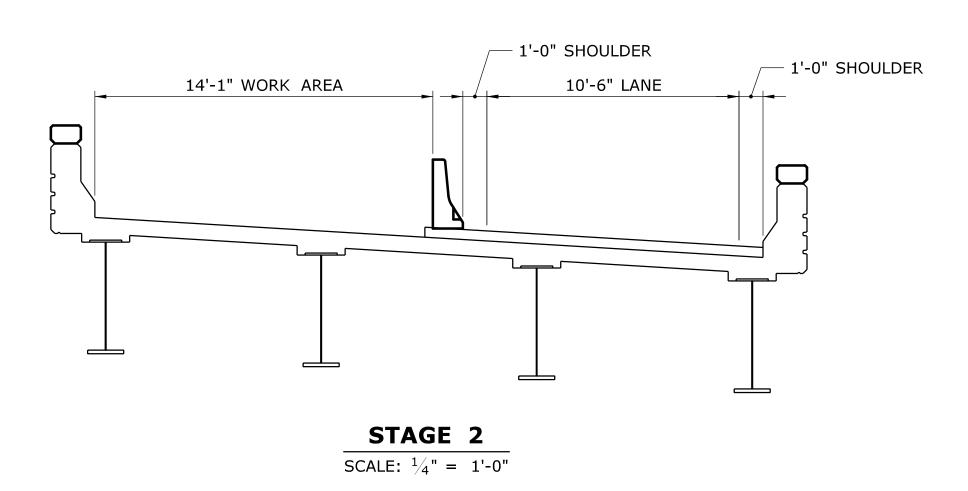
109-0172
DRAWING NO.
S-61
SHEET NO.

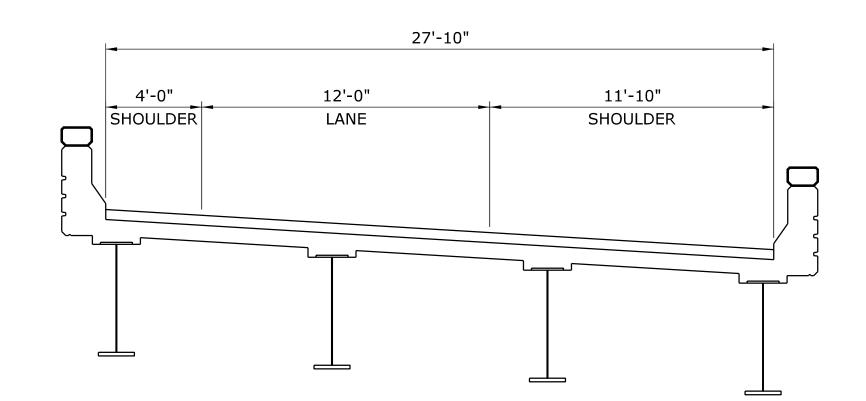


EXISTING CONDITION

SCALE: $\frac{1}{4}$ " = 1'-0"



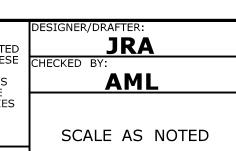


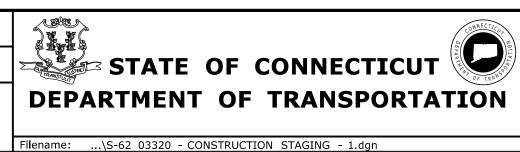


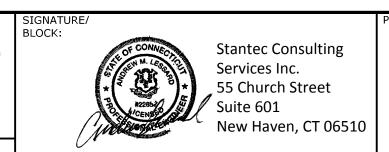
FINAL CONDITION

SCALE: $\frac{1}{4}$ " = 1'-0"

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| | | | | THE INFORMATION, INCLUDING ESTIMATED | |
| | | | | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED | C |
| | | | | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE | |
| | | | | THE CONDITIONS OF ACTUAL QUANTITIES | |
| | | | | OF WORK WHICH WILL BE REQUIRED. | |
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| REV. | DATE | REVISION DESCRIPTION | SHEET NO | Plotted Date: 7/17/2015 | |



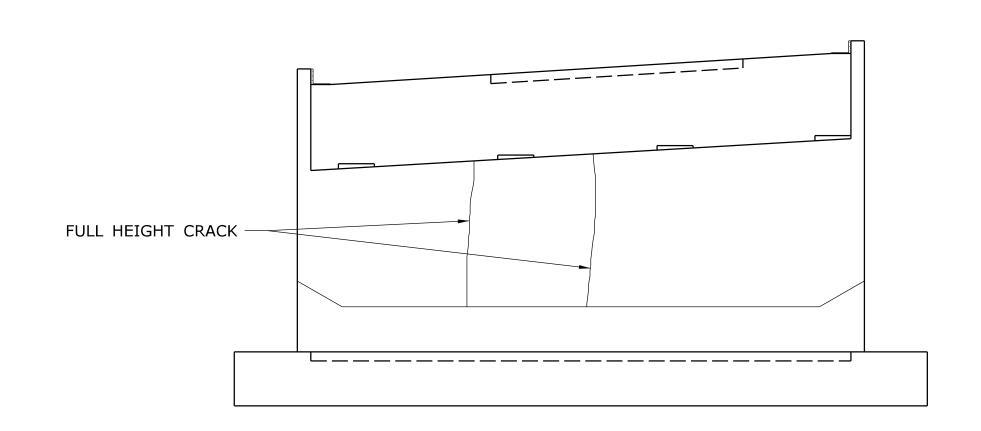




REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| PLAINVILLE | |
|------------|--|
| | |

| PLAINVILLE | 109-172 |
|------------------------------|---------|
| DRAWING TITLE: | S-62 |
| 03320 - CONSTRUCTION STAGING | 04.62 |



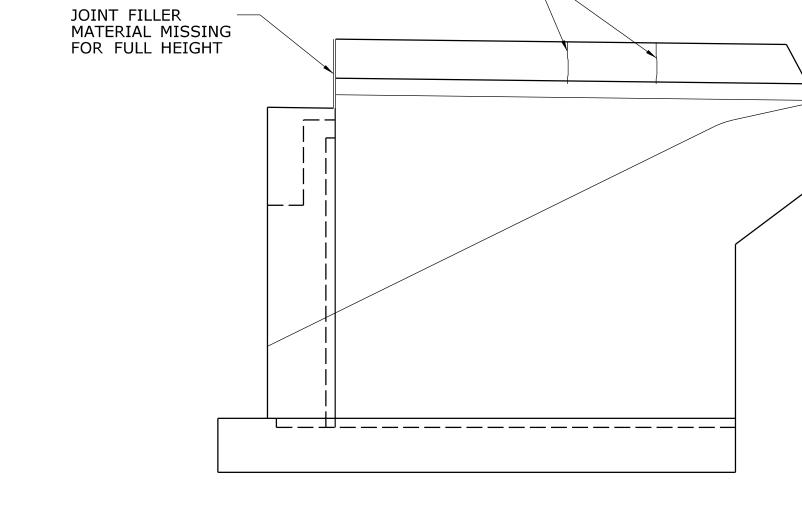
ELEVATION

SCALE: $\frac{3}{16}$ " = 1'-0"

ESIGNER/DRAFTER:

JRA

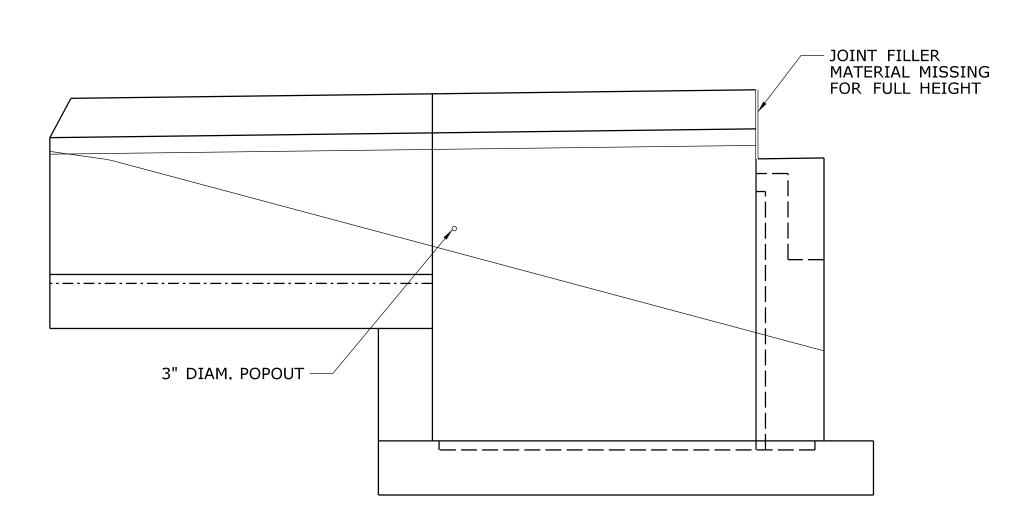
AML



WINGWALL 1A - ELEVATION

2' CRACK -

SCALE: $\frac{3}{16}$ " = 1'-0"



NOTES

1. SEE SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

WINGWALL 1B - ELEVATION

SCALE: $\frac{3}{16}$ " = 1'-0"

CRACK

SPALL

HOLLOW CONCRETE

CONCRETE DETERIORATION LEGEND

| - | - | - | _ | THE INFORMATION, INCLUDING ESTIMATED |
|------|------|----------------------|----------|--|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
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| - | - | - | _ | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
| - | - | - | - | |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO | Plotted Date: 7/17/2015 |

| STATE OF CONNECTICUT |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

Filename: ...\S-63 03320 - ABUTMENT 1 PLAN & ELEVATION.dgn



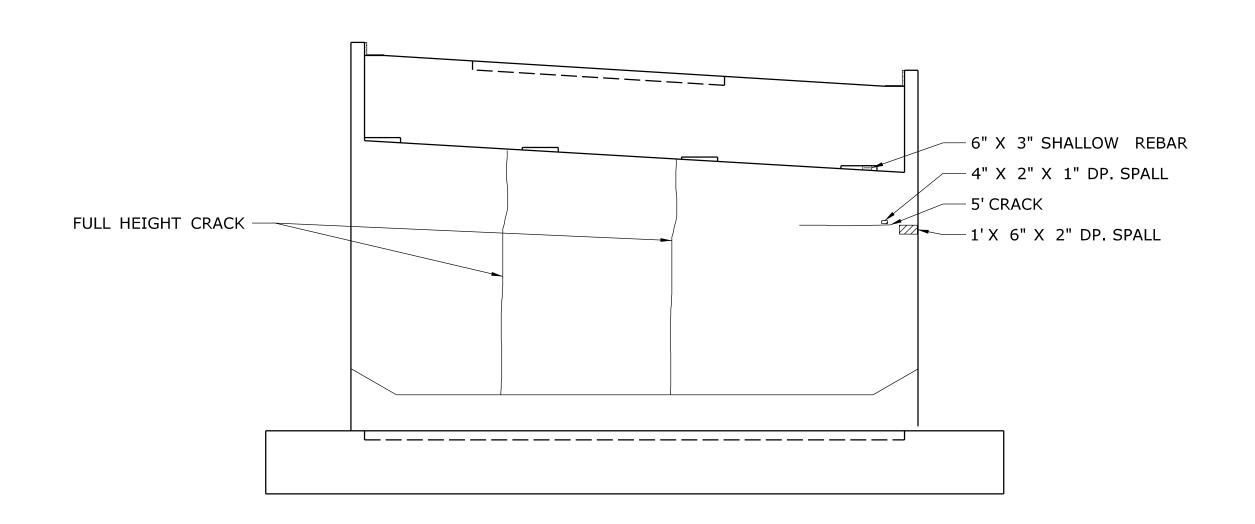
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | NVILLE & Britai | |
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| DRAWING | TITLE: | | |
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| | 109-017 |
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| | DRAWING NO. |
| | S-63 |
| T 1 | SHEET NO. 04.63 |
| | |

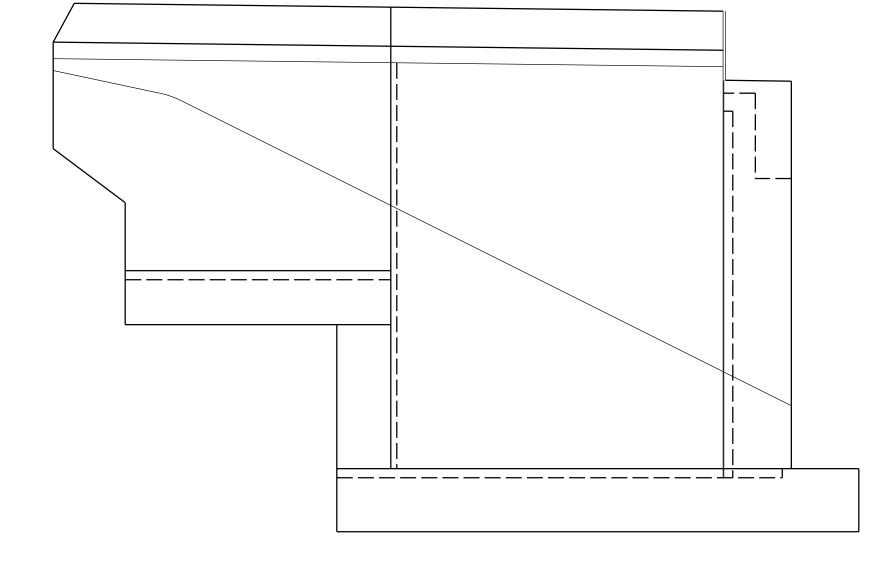
03320 - ABUTMENT 1
PLAN & ELEVATION

1. CONCRETE REPAIR DETAILS - 1



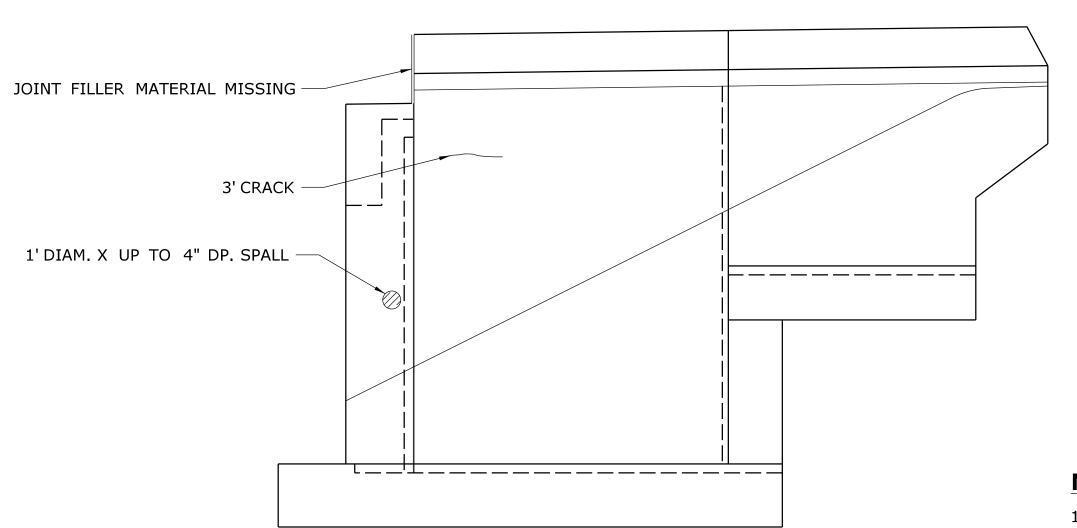
ELEVATION

SCALE: $\frac{3}{16}$ " = 1'-0"



WINGWALL 2A - ELEVATION

SCALE: $\frac{3}{16}$ " = 1'-0"



NOTES

1. SEE SUBSTRUCTURE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - - -- | - | -- - -- - - -

SHEET NO. Plotted Date: 7/17/2015

JRA **AML**

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-64 03320 - ABUTMENT 2 PLAN & ELEVATION.dgn



WINGWALL 2B - ELEVATION

SCALE: $\frac{3}{16}$ " = 1'-0"

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | | |
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03320 - ABUTMENT 2 PLAN & ELEVATION

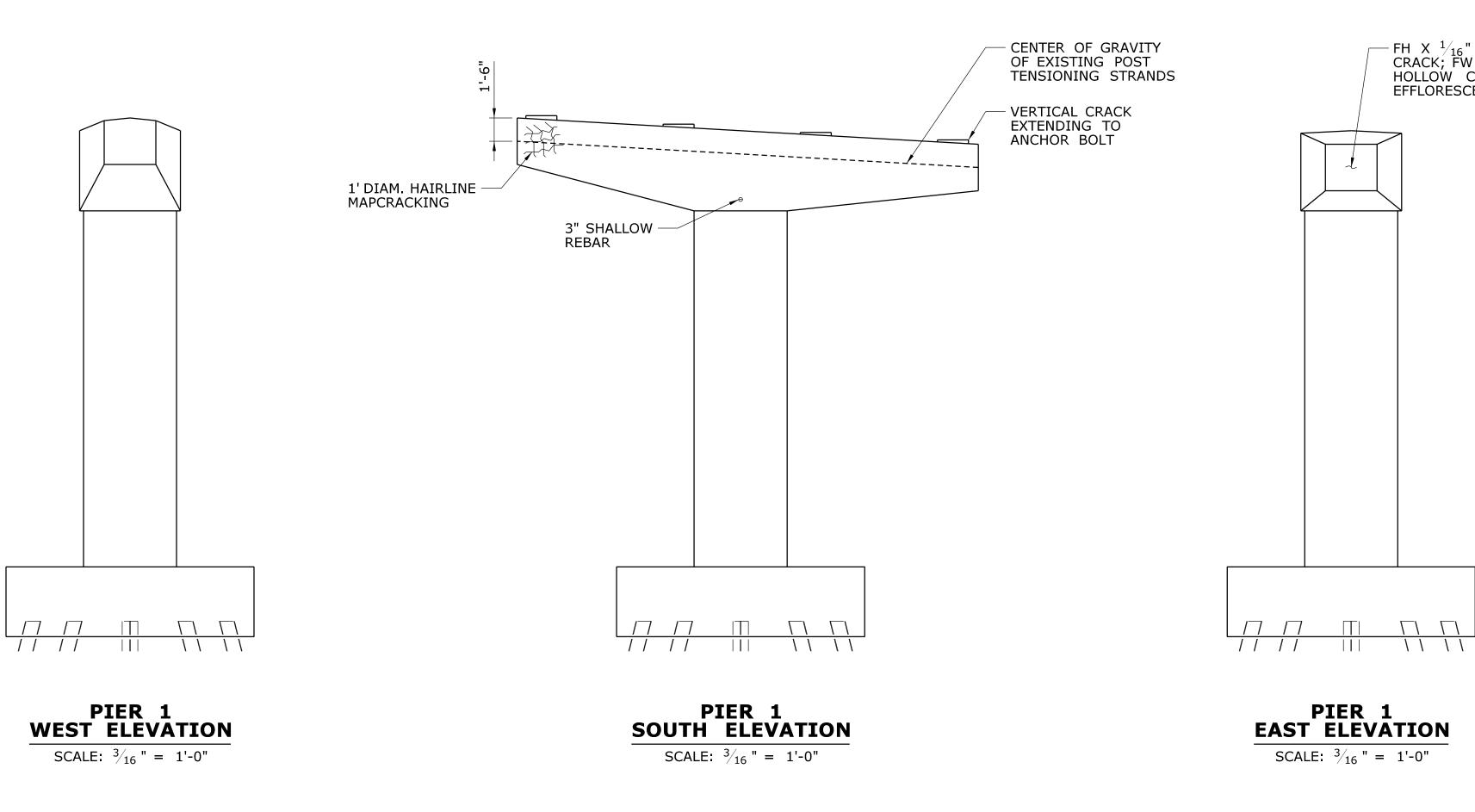
109-0172 S-64 04.64

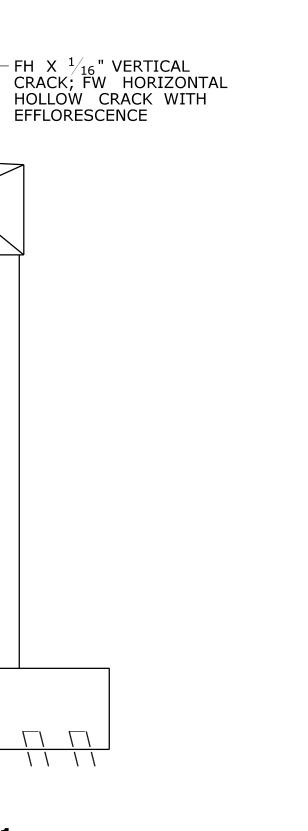
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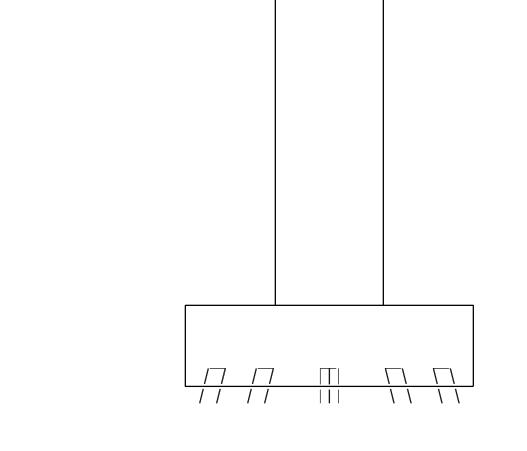
S-83

- CENTER OF GRAVITY
OF EXISTING POST
TENSIONING STRANDS

1. CONCRETE REPAIR DETAILS - 1







PIER 1 NORTH ELEVATION

SCALE: $\frac{3}{16}$ " = 1'-0"

NOTES

- 1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.
- 2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED. SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.
- 3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

CONCRETE DETERIORATION LEGEND

REVISION DESCRIPTION

CRACK

SPALL

REV. DATE

HOLLOW CONCRETE

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED |
|---|---|---|---|---|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
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SHEET NO. Plotted Date: 7/17/2015

IGNER/DRAFTER:

JRA

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REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| PLAINVILLE & NEW BRITAIN | |
|--------------------------|---|
| DRAWING TITLE: | |
| 03320 - PIER | 1 |

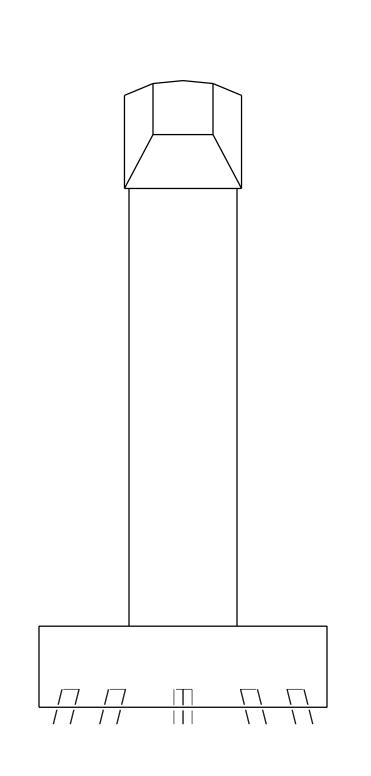
PLAN & ELEVATION

DRAWING NO.
S-65
SHEET NO.
04.65



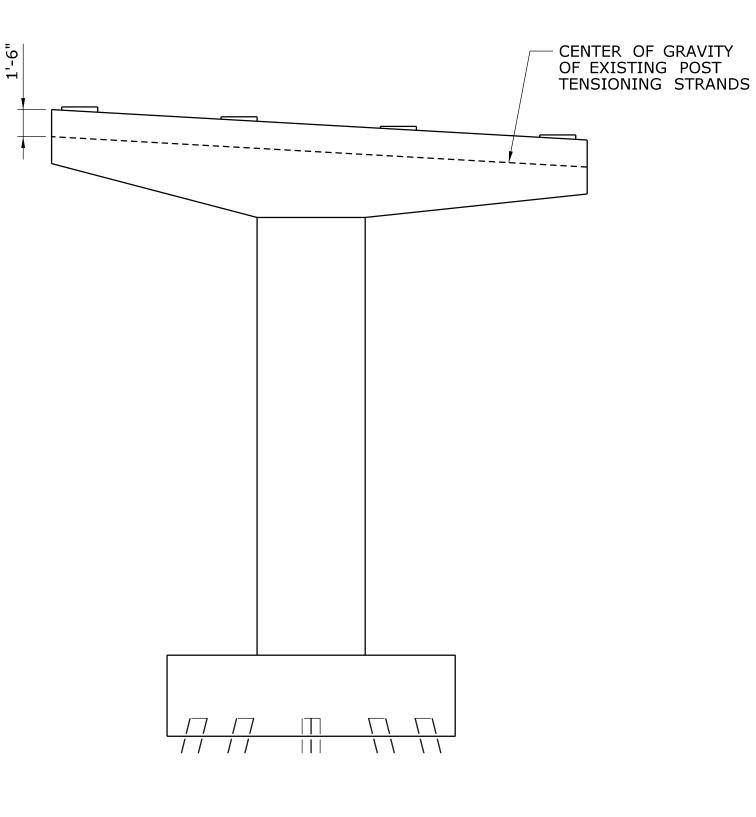
S-83

1. CONCRETE REPAIR DETAILS - 1

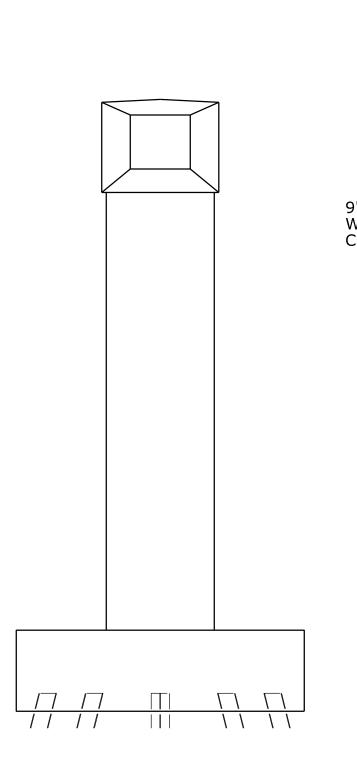


PIER 2
WEST ELEVATION

SCALE: $\frac{3}{16}$ " = 1'-0"

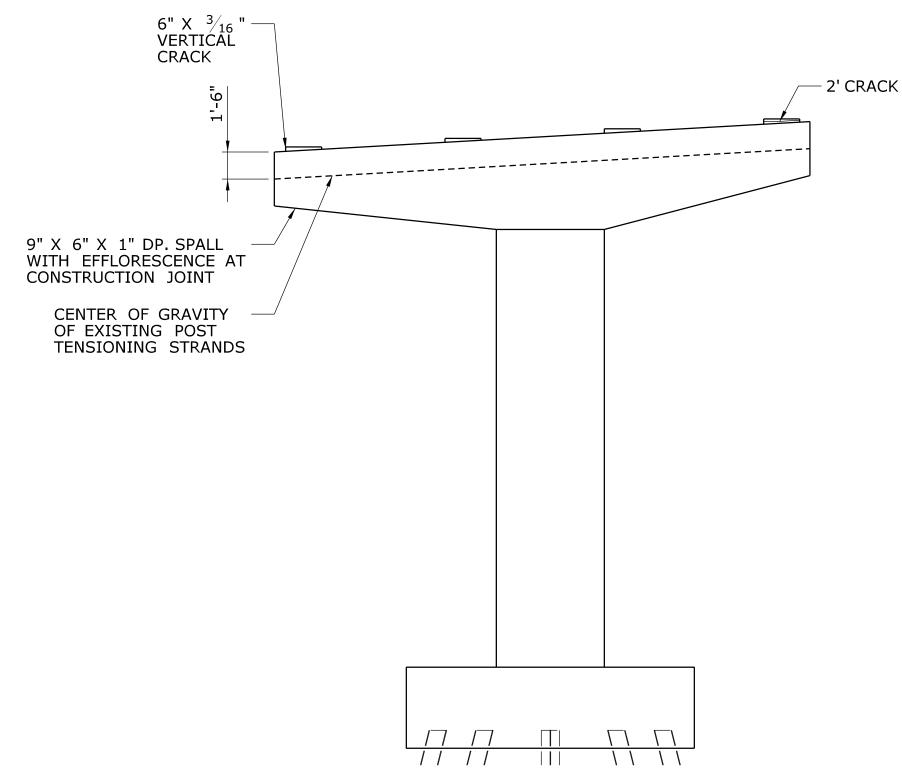


PIER 2 SOUTH ELEVATION SCALE: $\frac{3}{16}$ " = 1'-0"



PIER 2 EAST ELEVATION

SCALE: $\frac{3}{16}$ " = 1'-0"



PIER 2 NORTH ELEVATION

PERFORMING WORK RELATED TO CONCRETE REMOVAL AND REPAIR.

3. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04.

SCALE: $\frac{3}{16}$ " = 1'-0"

1. CONTRACTOR SHALL LOCATE THE EXISTING POST TENSIONING STRANDS ACCURATELY WITH NON-DESTRUCTIVE TECHNIQUES (SUCH AS PENETRATING RADAR) PRIOR TO

2. CARE SHALL BE TAKEN TO ENSURE THE EXISTING POST TENSIONING STRANDS ARE

SAW CUTTING IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT EXCEED $^3/_4$ " FROM THE AS-BUILT SURFACE OF PIER CAP BEAM.

CONCRETE DETERIORATION LEGEND

CRACK

SPALL

HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED

INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

REV. DATE

REVISION DESCRIPTION

SHEET NO. Plotted Date: 7/17/2015

DESIGNER/DRAFTER:

JRA

CHECKED BY:

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STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-66 03320 - PIER 2 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

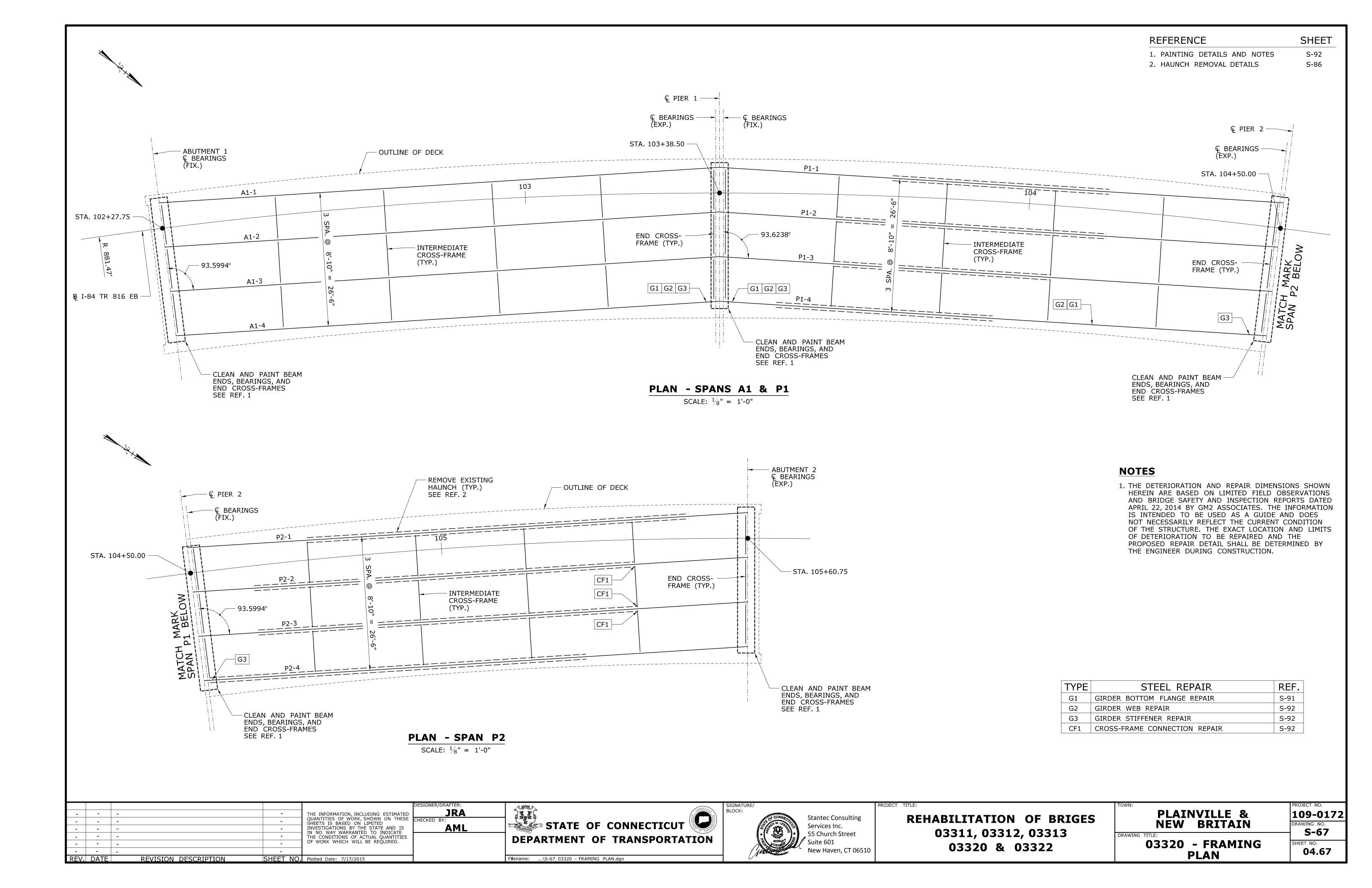
NOTES

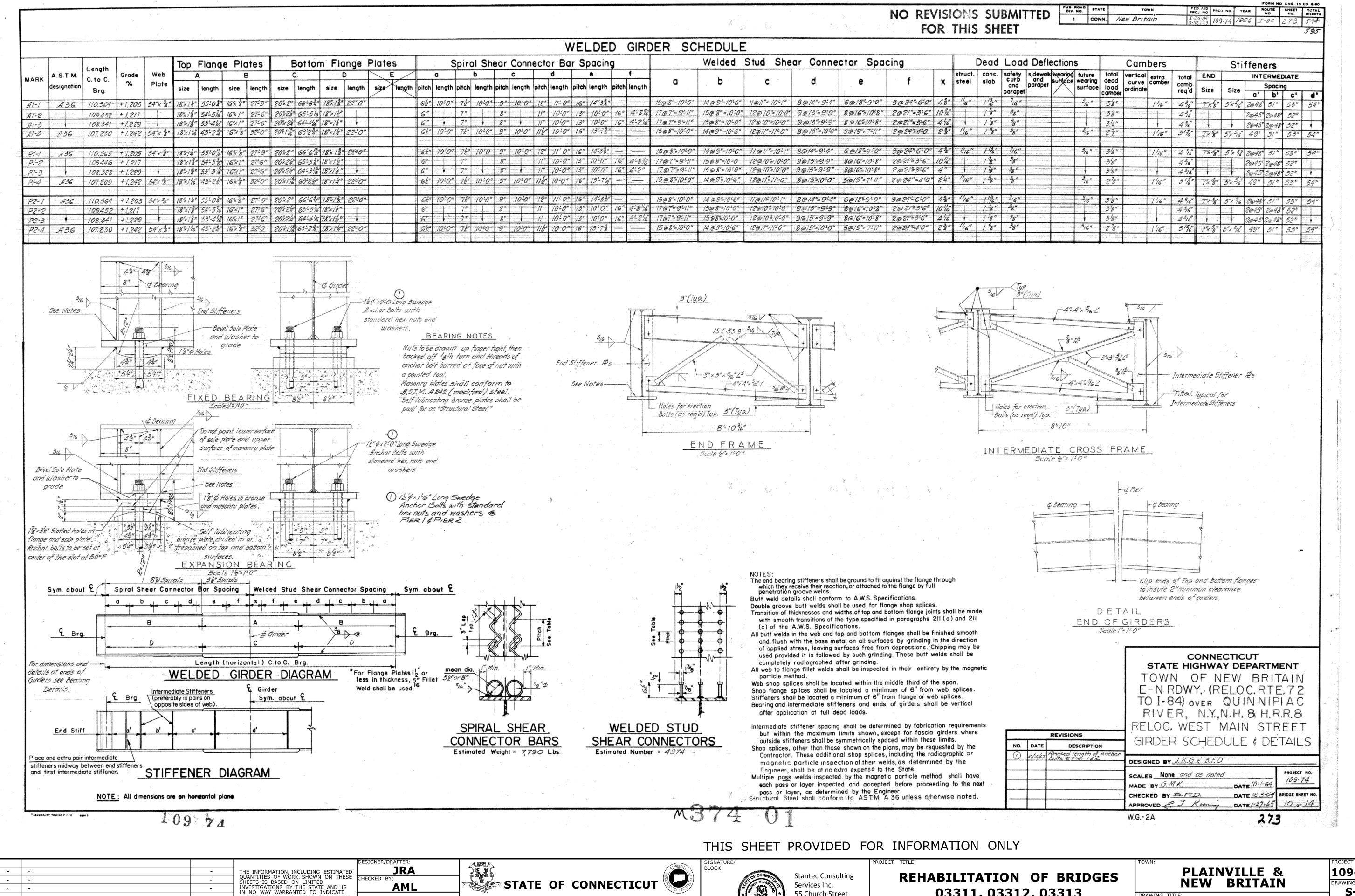
| TOWN: | | VILLE BRITA | |
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| DRAWING | TITLE: | | |

NOT DAMAGED IN CONCRETE REMOVAL AND REPAIR OPERATIONS. CONCRETE REMOVED IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL BE DONE CAREFULLY WITH CHIPPING HAMMERS NOT EXCEEDING 15 POUNDS IN WEIGHT WITH THE BIT REMOVED.

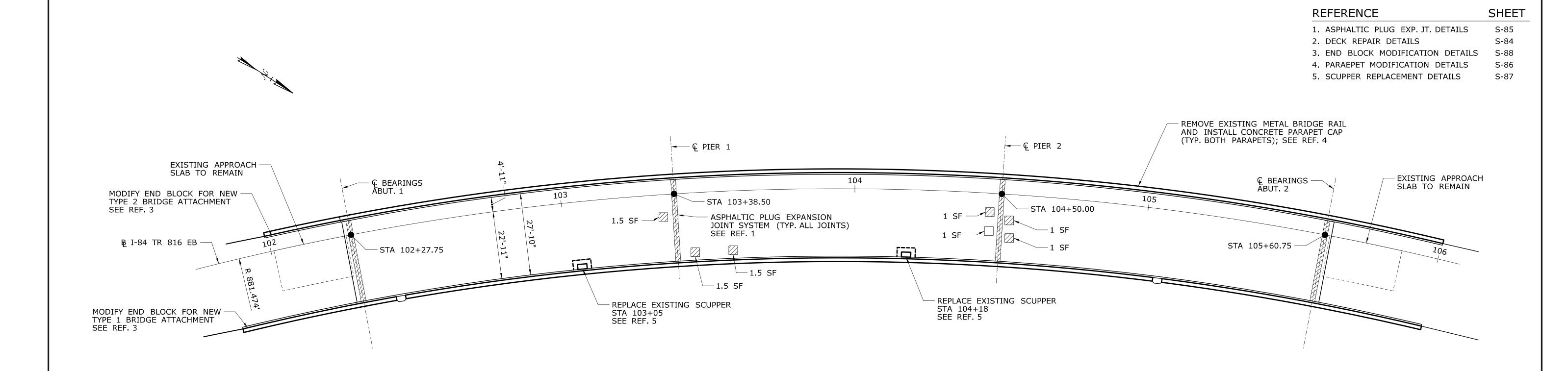
O3320 - PIER 2
PLAN & ELEVATION

109-0172
DRAWING NO.
S-66
SHEET NO.
04.66





109-0172 - | - | -**S-68** 03311, 03312, 03313 55 Church Street - | -THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. **DEPARTMENT OF TRANSPORTATION** Suite 601 **03320 - GIRDER** 03320 & 03322 _ | _ | _ New Haven, CT 06510 04.68 **SCHEDULE** REV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: 7/17/2015 Filename: ...\S-68 03320 - GIRDER SCHEDULE.dgn



PLAN - SPANS A1, P1 & P2

SCALE: $\frac{1}{16}$ " = 1'-0"

NOTES

REV. DATE

- REMOVE EXISTING HMA WEARING SURFACE AND MEMBRANE ON DECK AND APPROACH SLABS, AND INSTALL NEW HMA WEARING SURFACE ON NEW MEMBRANE WATERPROOFING.
- 2. AFTER REMOVAL OF THE EXISTING HMA WEARING SURFACE, REPAIR AREAS OF DETERIORATED CONCRETE ENCOUNTERED AFTER MILLING OPERATIONS HAVE BEEN COMPLETED.

REVISION DESCRIPTION

CONCRETE DETERIORATION LEGEND

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SPALL

SHEET NO. Plotted Date: 7/17/2015

HOLLOW CONCRETE

| - | - | - | • | THE INFORMATION, INCLUDING ESTIMATED |
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| - | - | - | | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | 1 | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
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| | DEPARTMENT OF TRANSPORTAT | OI |
|------------------------|---------------------------|------------------|
| CHECKED BY: AML | STATE OF CONNECTICUT | PARTMENT OF TRAN |
| DESIGNER/DRAFTER: JRA | | CONNECTICO |

Filename: ...\S-69 03320 - DECK PLAN.dgn

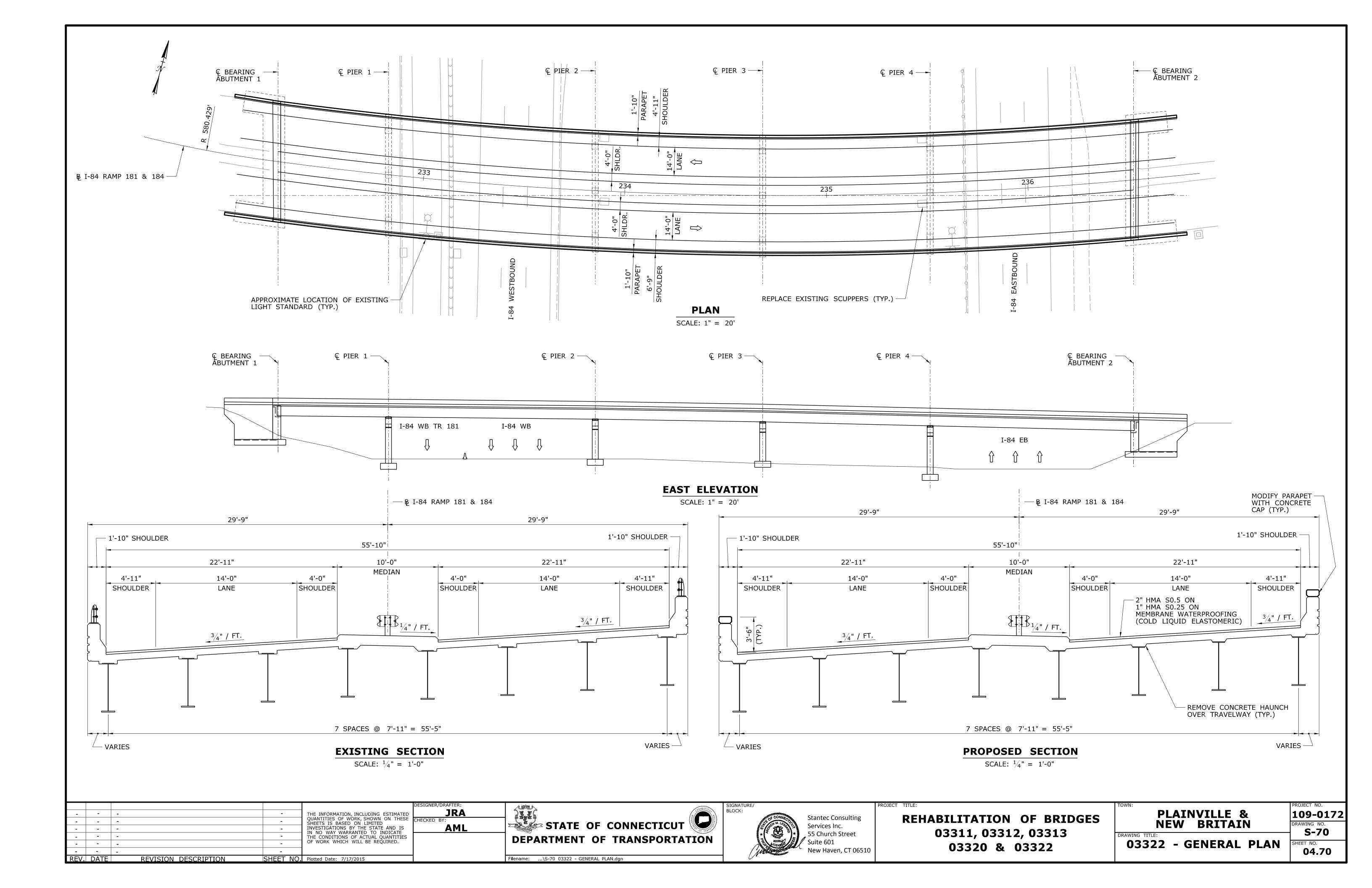


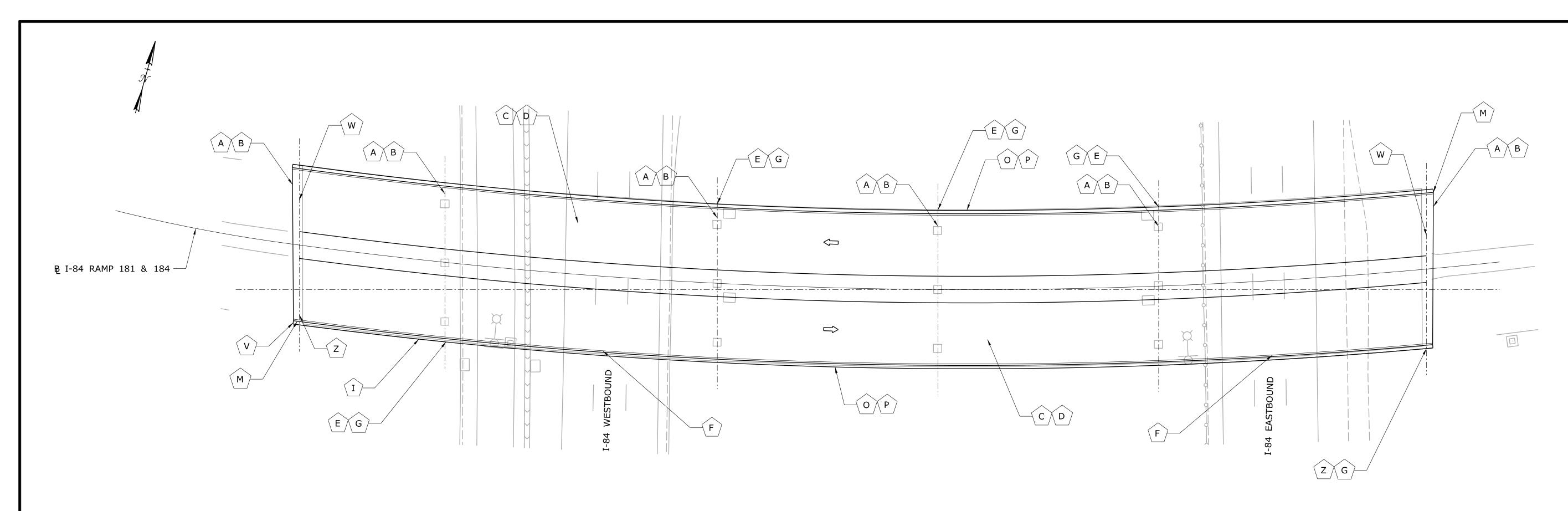
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| FOWN: | _ | | IVILLE | |
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| JD V W/TNIC | TITLE: | | | |

O3320 - DECK PLAN & DETAILS

109-0172
DRAWING NO.
S-69
SHEET NO.
04.69





PLAN

SCALE: 1" = 20'

| | SCOPE OF WORK LEGEND | | | |
|--------------------------------|---|--|--|--|
| DESIGNATION | DESCRIPTION OF WORK | | | |
| А | REPLACE JOINTS AT ABUTMENTS AND PIERS | | | |
| В | REPAIR DECK ENDS AT EACH JOINT AS REQUIRED | | | |
| С | MILL DECK, FULL AND PARTIAL DEPTH DECK PATCH | | | |
| D | PLACE NEW MEMBRANE WATERPROOFING AND BITUMINOUS OVERLAY OVER ENTIRE DECK | | | |
| E | CLEAN AND PAINT BEAM ENDS, BEARING DEVICES AND OTHER AREAS AS NEEDED | | | |
| F REMOVE HAUNCHES OVER ROADWAY | | | | |
| G | REPAIR SUBSTRUCTURE AS NECESSARY | | | |
| I | REPAIR SUPERSTRUCTURE AS NECESSARY | | | |
| М | MODIFY APPROACH END BLOCK AND UPDATE LEADING END GUIDRAIL ATTACHMENT | | | |
| 0 | MODIFY BRIDGE PARAPET WITH CONCRETE CAP | | | |
| Р | REPAIR PARAPETS AS REQUIRED (FULL LENGTH) | | | |
| V | PLACE JOINT SEALANT BETWEEN EAST ABUTMENT AND WINGWALLS | | | |
| W | REPLACE EAST AND WEST ABUTMENT EXPANSION BEARING WITH ELASTOMERIC BEARINGS AND INSTALL ABUTMENT KEEPER BLOCKS | | | |
| Z | CLEAN AND PAINT BEAM ENDS AND OTHER AREAS AS NEEDED | | | |

| _ | | | | | | |
|---|------|------|----------------------|-----------|---|-----|
| 1 | | | | | | DES |
| ı | - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED | |
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| ı | - | - | - | - | OF WORK WHICH WILL BE REQUIRED. | |
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| ı | REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/17/2015 | |

ESIGNER/DRAFTER:

JRA

HECKED BY:

AML

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\S-71 03322 - SCOPE OF WORK.dgn



PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| IOWN: | | NVILLE BRITA | |
|---------|--------|-----------------|--|
| ORAWING | TITLE: | | |

DRAWING TITLE:

O3322 - SCOPE OF WORK

SHEET NO.

04.71

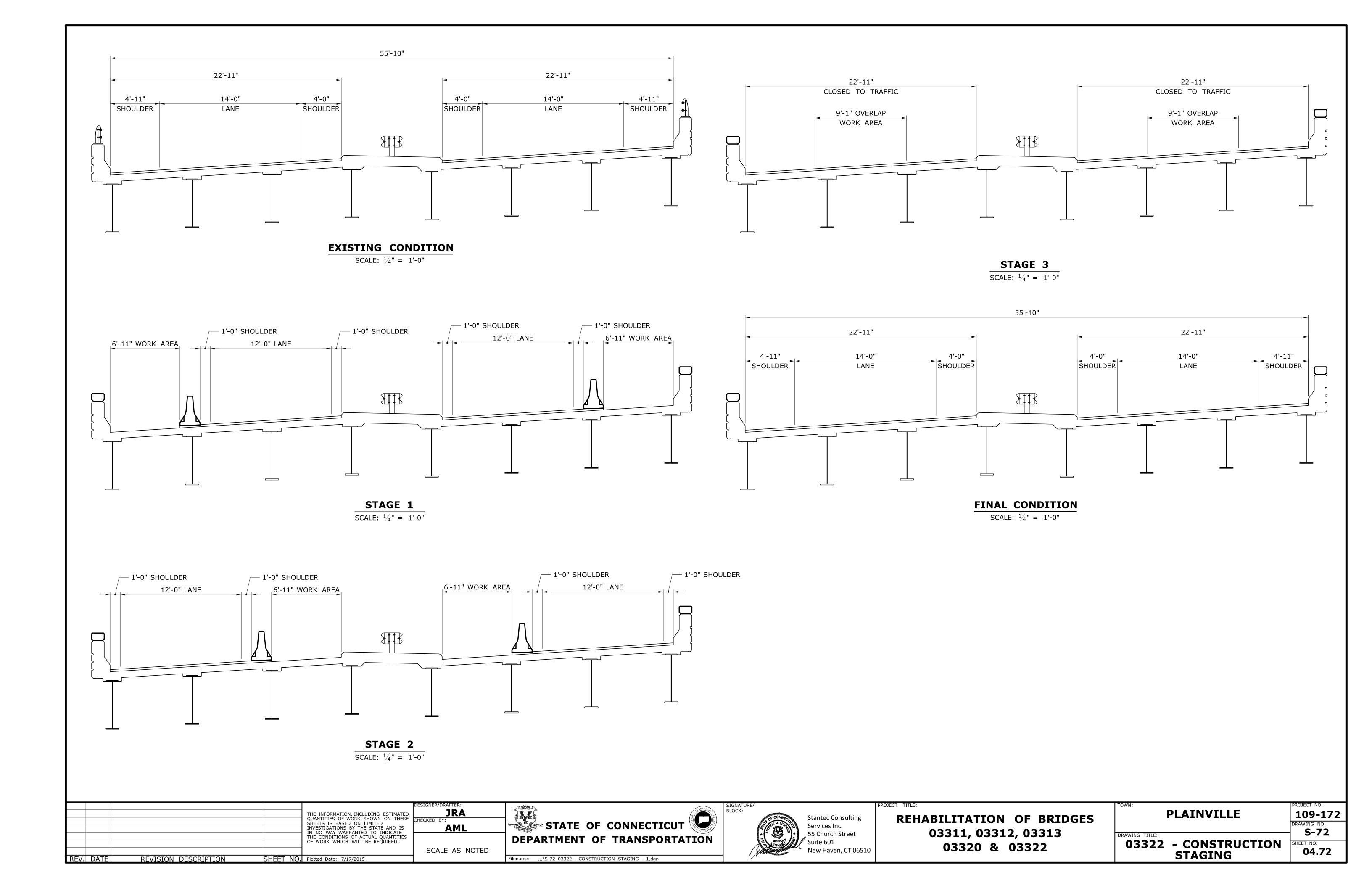
PROJECT NO.

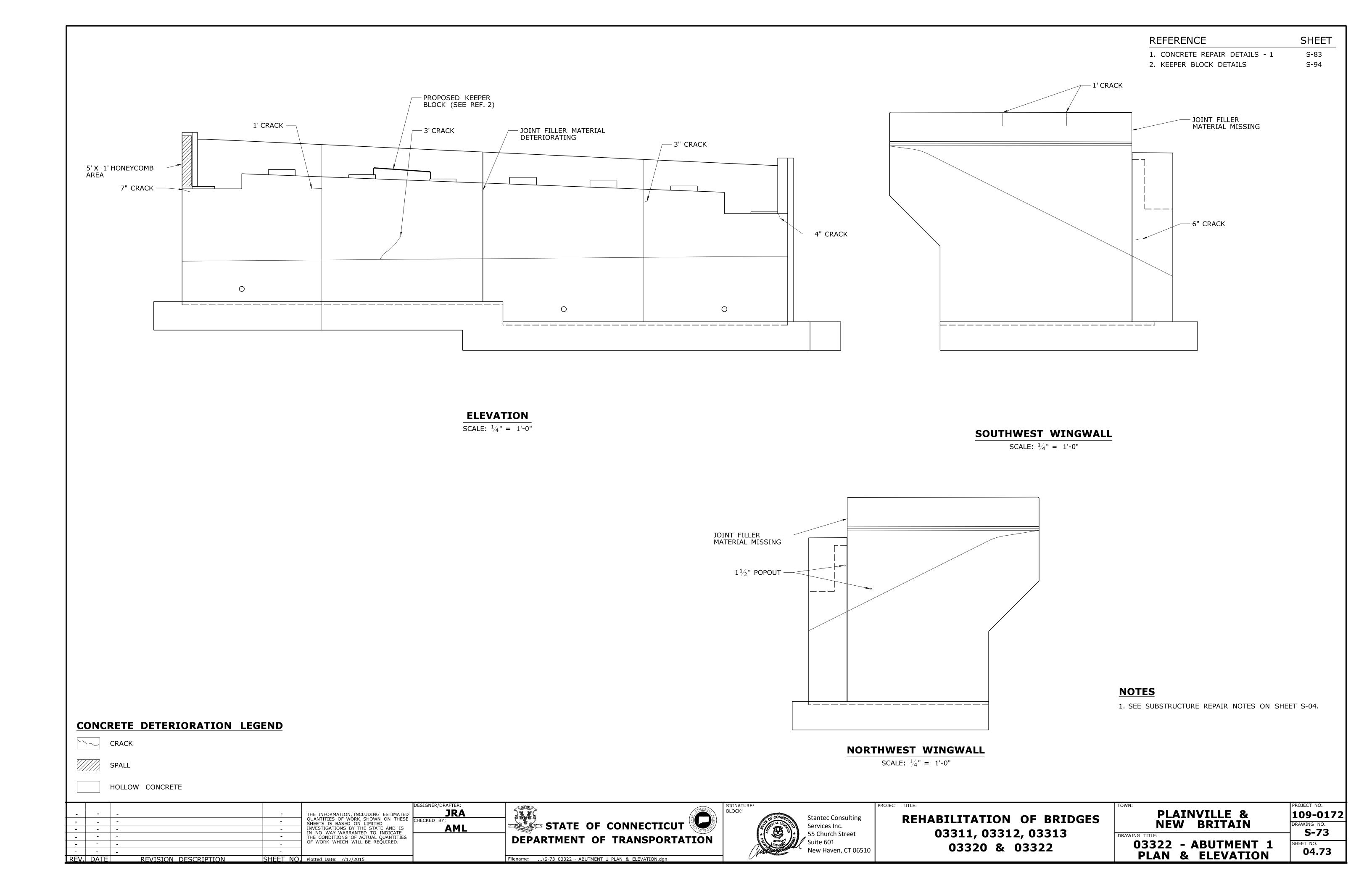
109-0172

DRAWING NO.

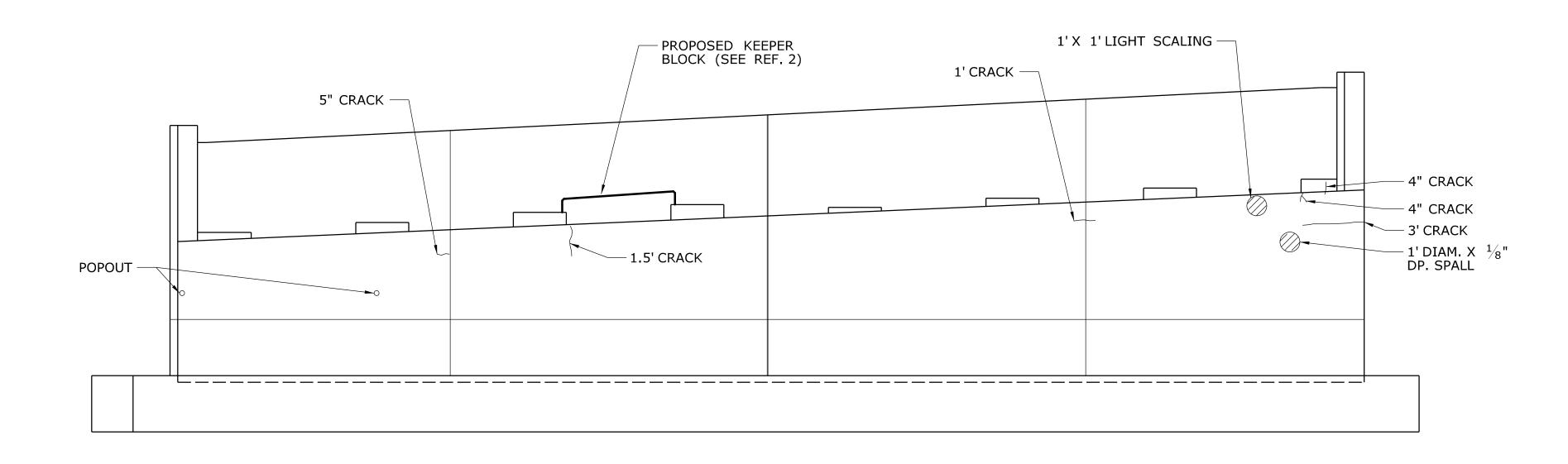
S-71

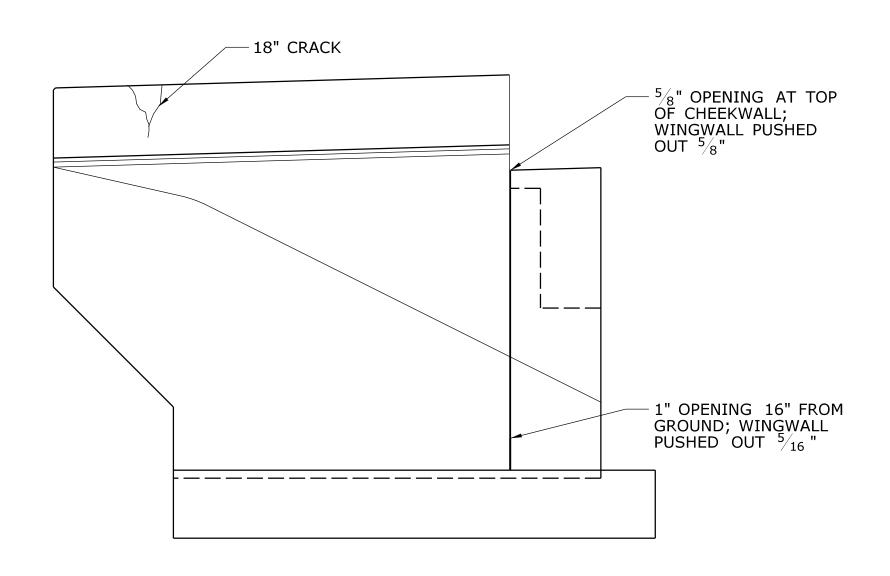
SHEET NO.





REFERENCE SHEET 1. CONCRETE REPAIR DETAILS - 1 S-83 S-94 2. KEEPER BLOCK DETAILS

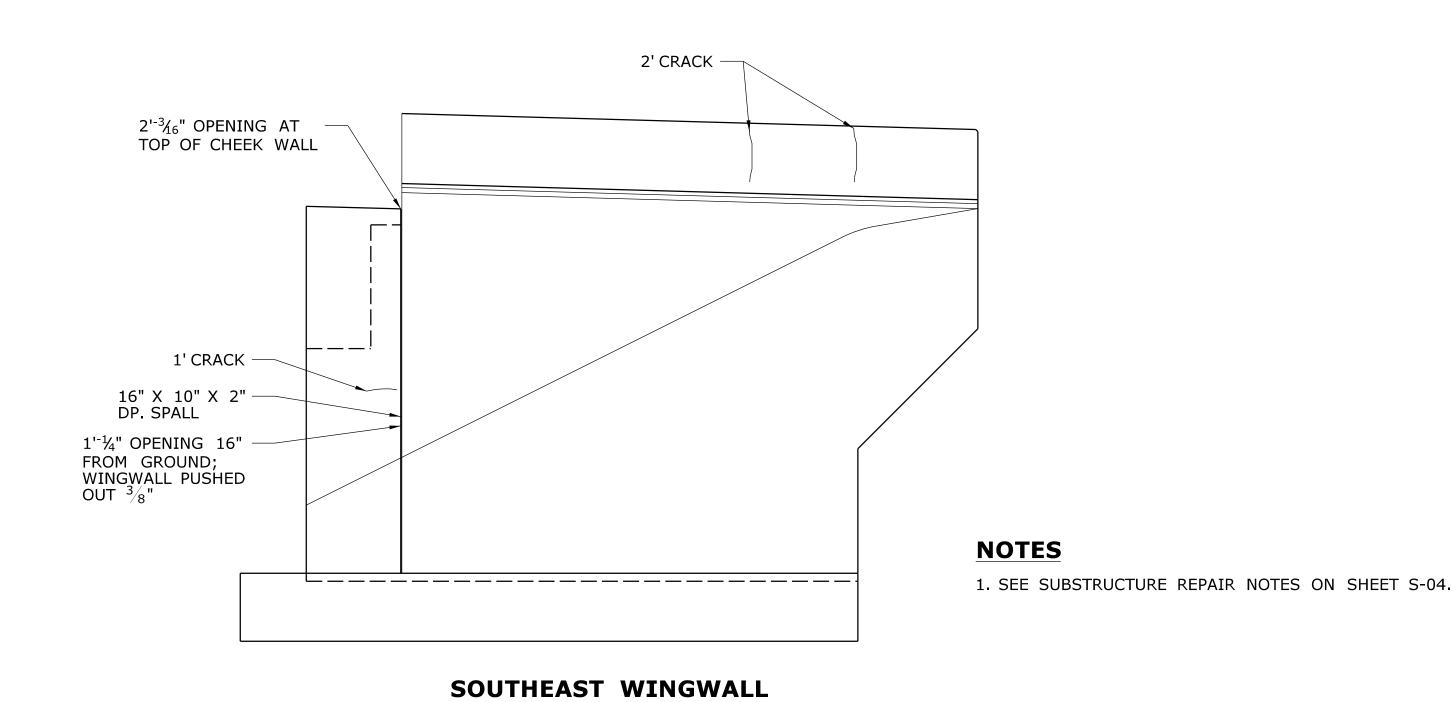




ELEVATION

SCALE: $\frac{1}{4}$ " = 1'-0"

NORTHEAST WINGWALL SCALE: $\frac{1}{4}$ " = 1'-0"

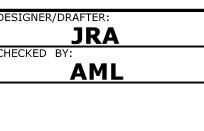


CONCRETE DETERIORATION LEGEND

CRACK SPALL

HOLLOW CONCRETE

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATED |
|------|------|----------------------|----------|---|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
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| REV. | DATE | REVISION DESCRIPTION | SHEET NO | Plotted Date: 7/17/2015 |



STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-74 03322 - ABUTMENT 2 PLAN & ELEVATION.dgn



SCALE: $\frac{1}{4}$ " = 1'-0"

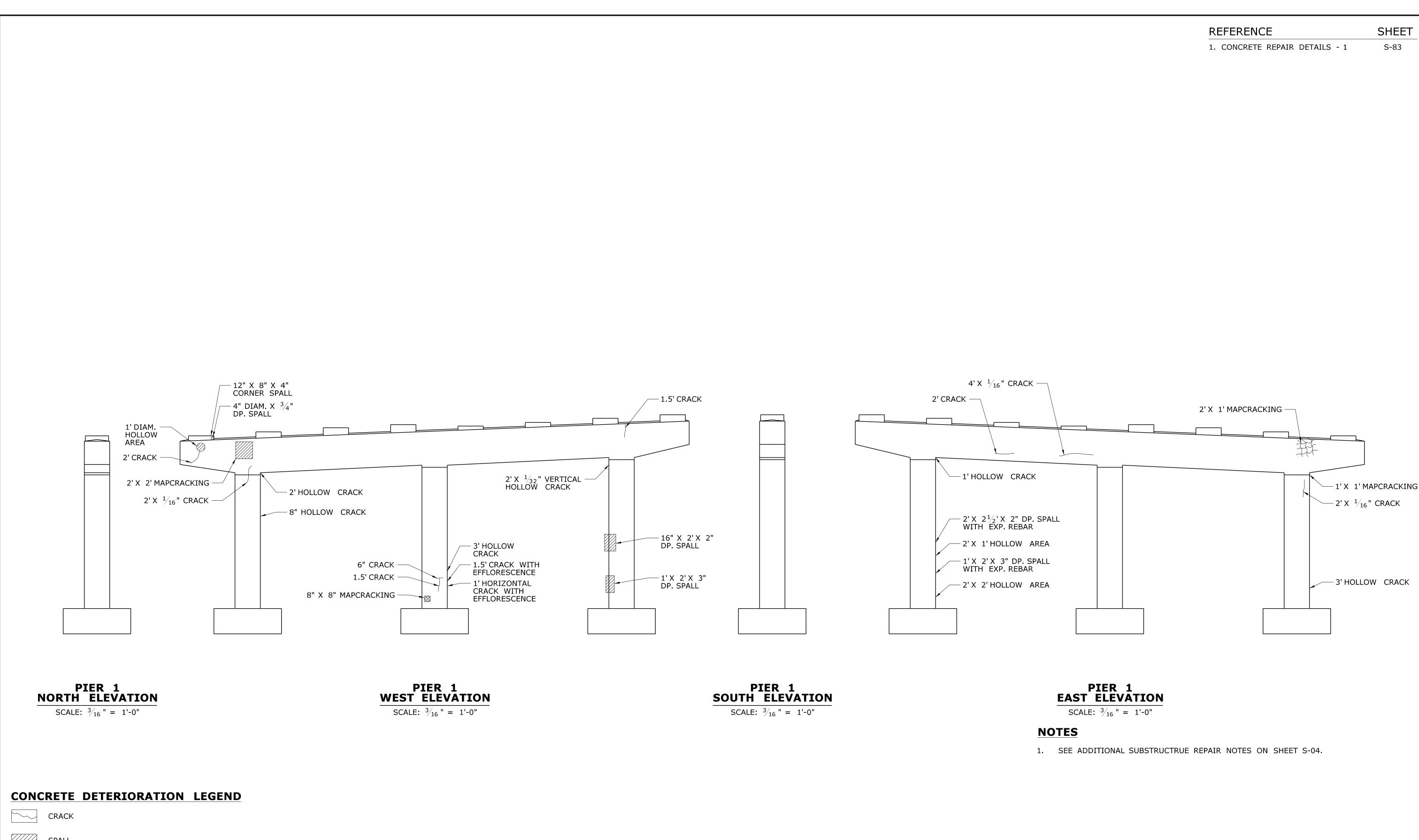
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | | |
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| DRAWING | TITI F: | | |

03322 - ABUTMENT 2 PLAN & ELEVATION

109-0172 DRAWING NO.

S-74 SHEET NO. **04.74**



SPALL

REV. DATE

HOLLOW CONCRETE

REVISION DESCRIPTION

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SHEET NO. Plotted Date: 7/17/2015

JRA **AML**

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-75 03322 - PIER 1 PLAN & ELEVATION.dgn



REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| | VILLE & BRITAIN |
|----------------|-----------------|
| DRAWING TITLE: | |
| 00000 | DIED |

109-0172 S-75 03322 - PIER 1 04.75 **PLAN & ELEVATION**

REFERENCE SHEET 1. CONCRETE REPAIR DETAILS - 1 S-83 −1' CRACK — 8" CRACK \sim 2' X $^{1}/_{16}$ " CRACK \sim 6" CRACK — 1.5' CRACK $_{/}$ 3.5' X $^{1}/_{16}$ " CRACK - 1.5' VERTICAL HOLLOW CRACK 1' VERTICAL -HOLLOW CRACK _____1.5' CRACK – 6" DIAM. HOLLOW AREA 1' CRACK -1' CRACK -− 2' CRACK 3" SHALLOW REBAR — 1.5' CRACK - 6" HOLLOW CRACK - 1.5' X $^{1}\!/_{32}$ " HOLLOW CRACK WITH WITH EFFLORESCENCE **EFFLORESCENCE** PIER 2 NORTH ELEVATION PIER 2 WEST ELEVATION PIER 2 SOUTH ELEVATION PIER 2
EAST ELEVATION SCALE: $\frac{3}{16}$ " = 1'-0" **NOTES** 1. SEE ADDITIONAL SUBSTRUCTRUE REPAIR NOTES ON SHEET S-04. **CONCRETE DETERIORATION LEGEND** CRACK

SPALL

HOLLOW CONCRETE

- - - THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

REV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: 7/17/2015

ESIGNER/DRAFTER:

JRA

HECKED BY:

AML

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-76 03322 - PIER 2 PLAN & ELEVATION.dgn



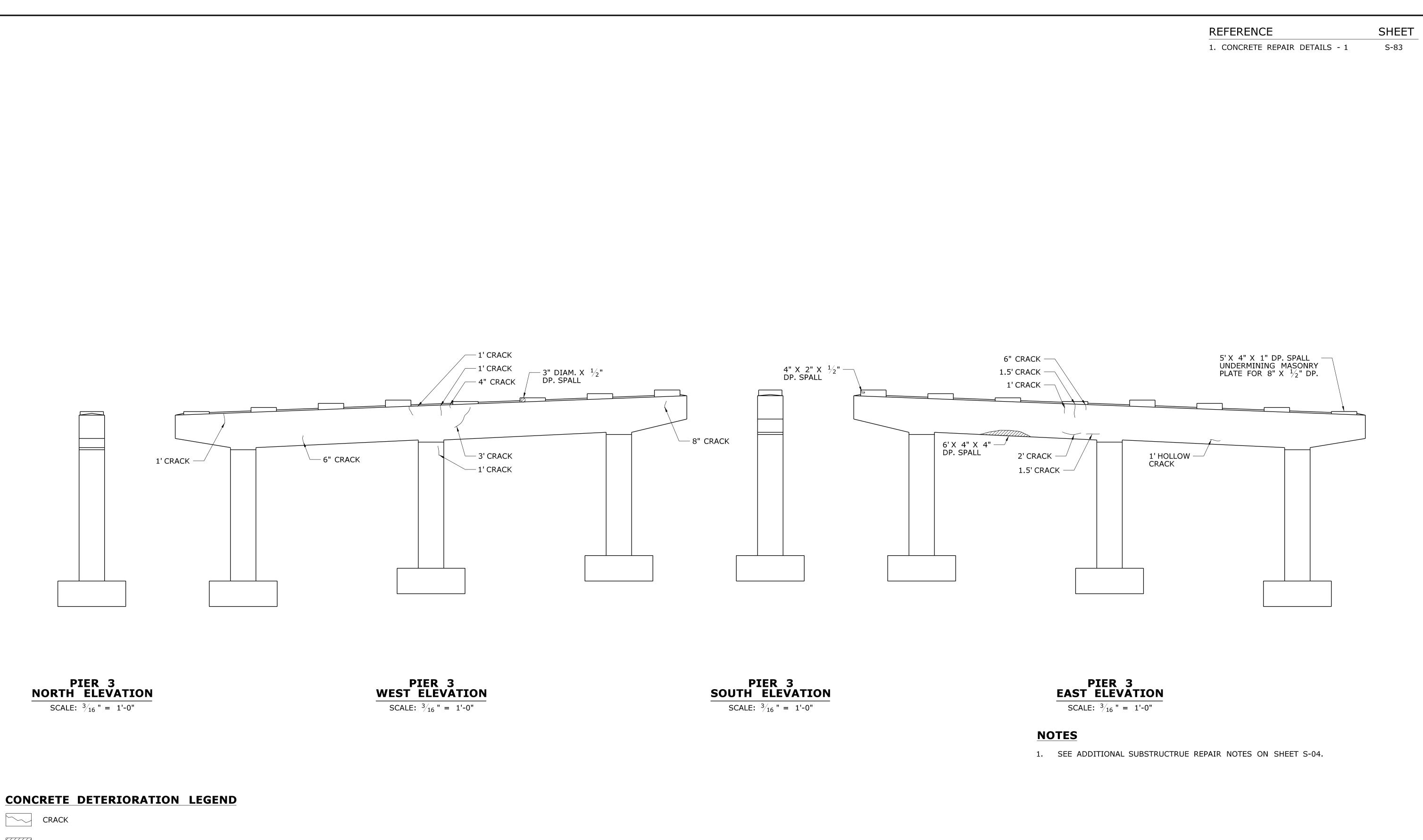
PROJECT TITLE:

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | |
|----------------|---|
| PLAINVILLE 8 | |
| NEW BRITAI | N |
| DRAWING TITLE: | |
| | |

03322 - PIER 2 PLAN & ELEVATION DRAWING NO. **S-76**SHEET NO. **04.76**

109-0172



SPALL

HOLLOW CONCRETE

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

REV. DATE

REVISION DESCRIPTION

SHEET NO. Plotted Date: 7/17/2015

SNER/DRAFTER:

JRA

KED BY:

AML

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Filename: ...\S-77 03322 - PIER 3 PLAN & ELEVATION.dgn

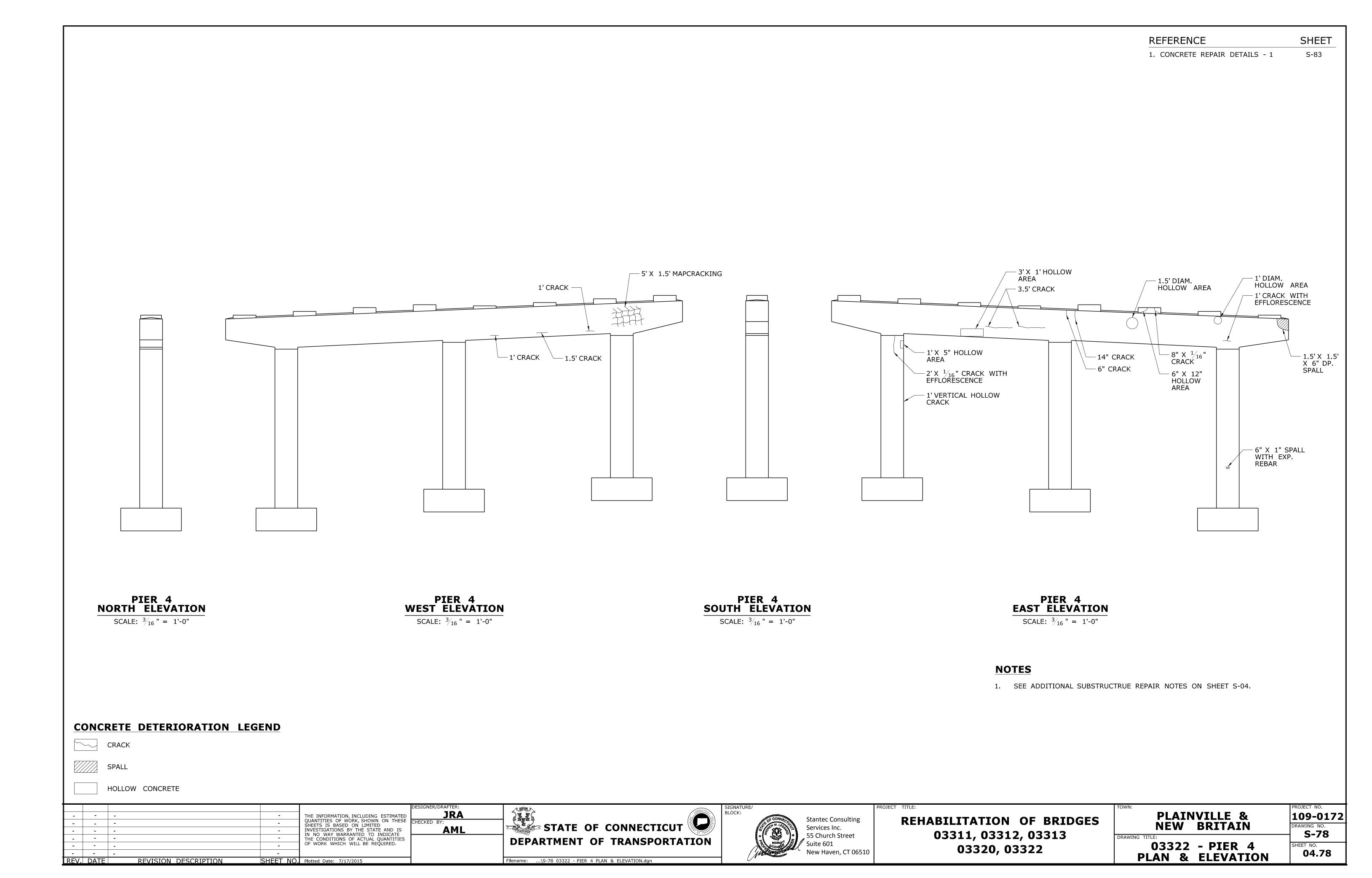


REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322 PLAINVILLE & NEW BRITAIN

PRAWING TITLE:

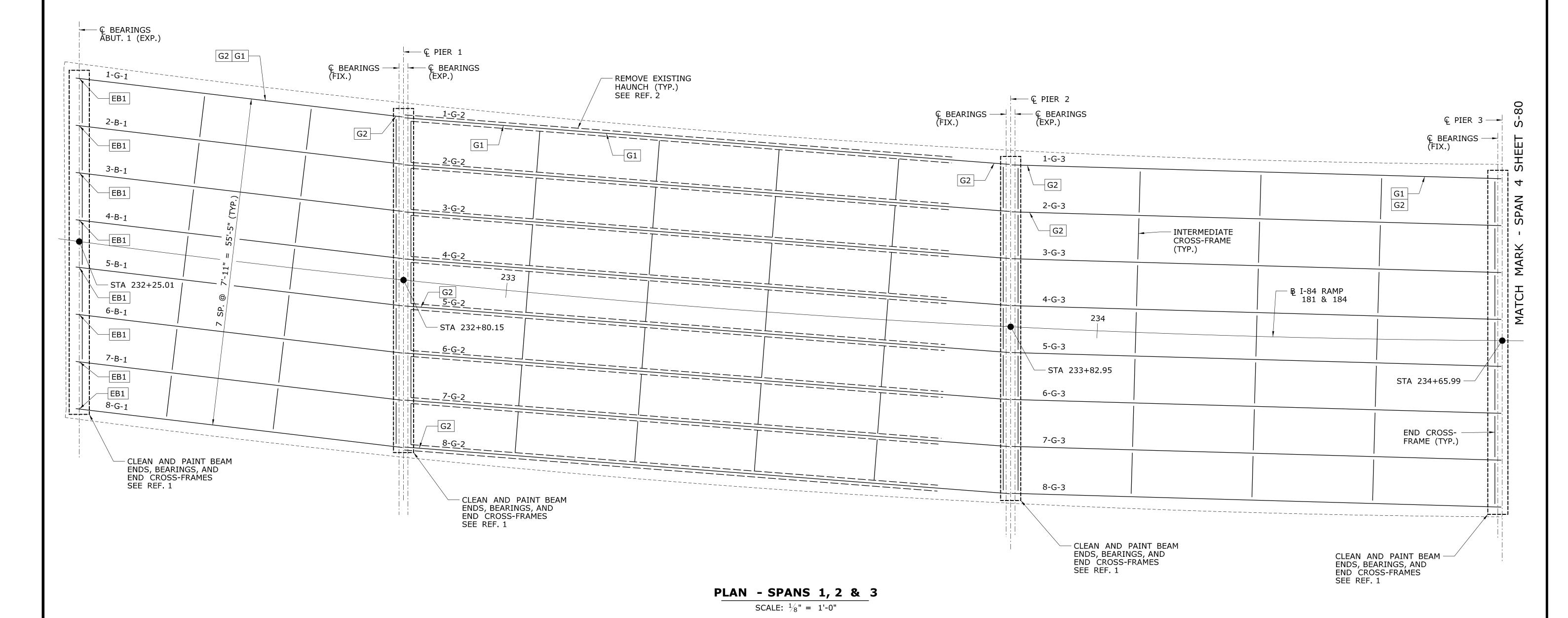
109-0172
DRAWING NO.
S-77
SHEET NO.
04.77

03322 - PIER 3 PLAN & ELEVATION



REFERENCE SHEET

1. PAINTING DETAILS AND NOTES S-92
2. HAUNCH REMOVAL DETAILS S-86

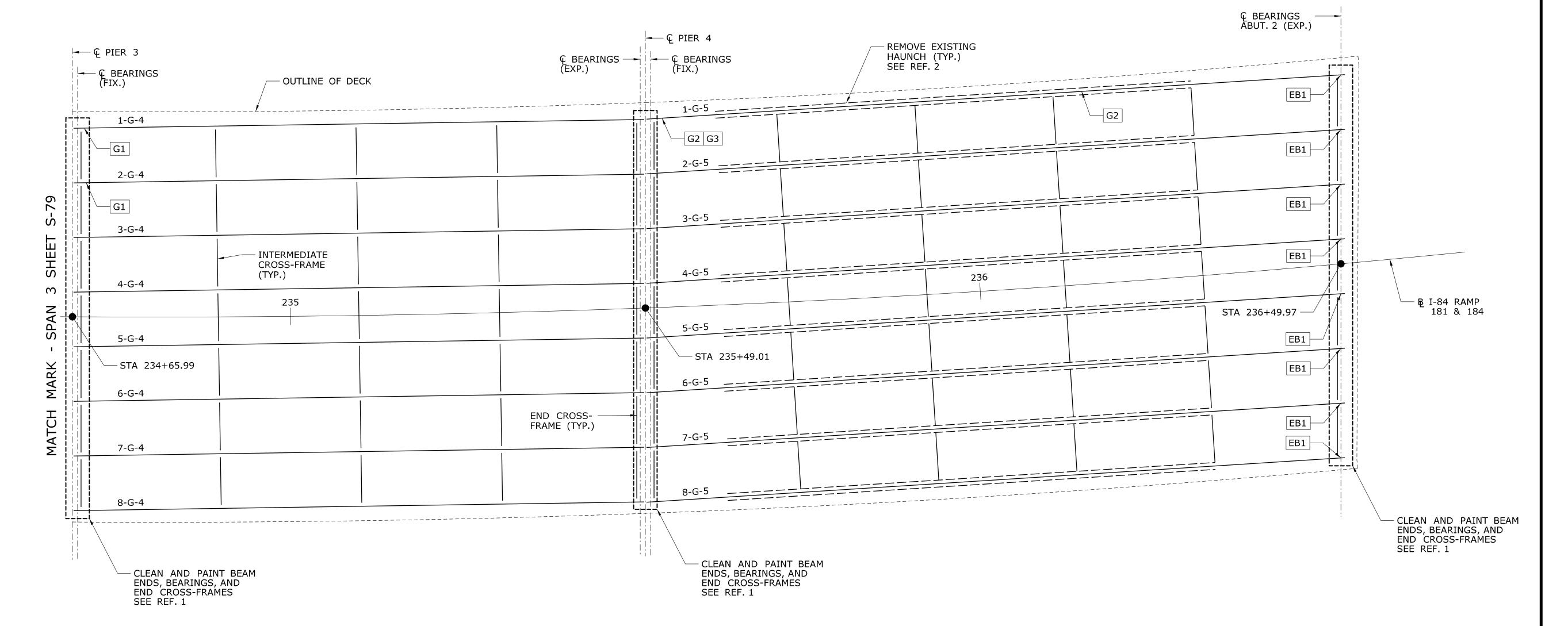


NOTES

1. THE DETERIORATION AND REPAIR DIMENSIONS SHOWN HEREIN ARE BASED ON LIMITED FIELD OBSERVATIONS AND BRIDGE SAFETY AND INSPECTION REPORTS DATED MAY 20, 2014 BY PENNONI ASSOCIATES. THE INFORMATION IS INTENDED TO BE USED AS A GUIDE AND DOES NOT NECESSARILY REFLECT THE CURRENT CONDITION OF THE STRUCTURE. THE EXACT LOCATION AND LIMITS OF DETERIORATION TO BE REPAIRED AND THE PROPOSED REPAIR DETAIL SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

| TYPE | STEEL REPAIR | REF. |
|------|-------------------------------|------|
| G1 | GIRDER BOTTOM FLANGE REPAIR | S-91 |
| G2 | GIRDER WEB REPAIR | S-92 |
| G3 | GIRDER STIFFENER REPAIR | S-92 |
| CF1 | CROSS-FRAME CONNECTION REPAIR | S-92 |
| EB1 | ELASTOMERIC BEARING REPAIR | S-93 |

| | DESIGNER/DRAFTER: | A SARRELL AND A | SIGNATURE/ | PROJECT TITLE: | TOWN: | PROJECT NO. |
|--|---|---|---------------------------|----------------------------|-----------------|-------------|
| | THE INFORMATION, INCLUDING ESTIMATED JRA | | BLOCK: Stantec Consulting | DELIABILITATION OF BRIDGES | PLAINVILLE & | 109-0172 |
| | QUANTITIES OF WORK, SHOWN ON THESE CHECKED BY: | STATE OF CONNECTICUT | Statite Consulting | REHABILITATION OF BRIDGES | NEW BRITAIN | DRAWING NO. |
| | INVESTIGATIONS BY THE STATE AND IS IN NO. WAY WARPANTED TO INDICATE AML | STATE OF CONNECTICOT | Services Inc. | 03311, 03312, 03313 | MEW DISTIATION | S-79 |
| | THE CONDITIONS OF ACTUAL QUANTITIES | DEPARTMENT OF TRANSPORTATION | 55 Church Street | 03311, 03312, 03313 | DRAWING TITLE: | 3-79 |
| | OF WORK WHICH WILL BE REQUIRED. | DEFARIMENT OF TRANSPORTATION | Suite 601 | 03320, & 03322 | 03322 - FRAMING | SHEET NO. |
| | | | New Haven, CT 06510 | 05520, & 05522 | PLAN - 1 | 04.79 |
| REV. DATE REVISION DESCRIPTION SHEET NO. | Plotted Date: 7/17/2015 | Filename:\S-79 03322 - FRAMING PLAN - 1.dgn | | | PLAN - I | |



NOTES

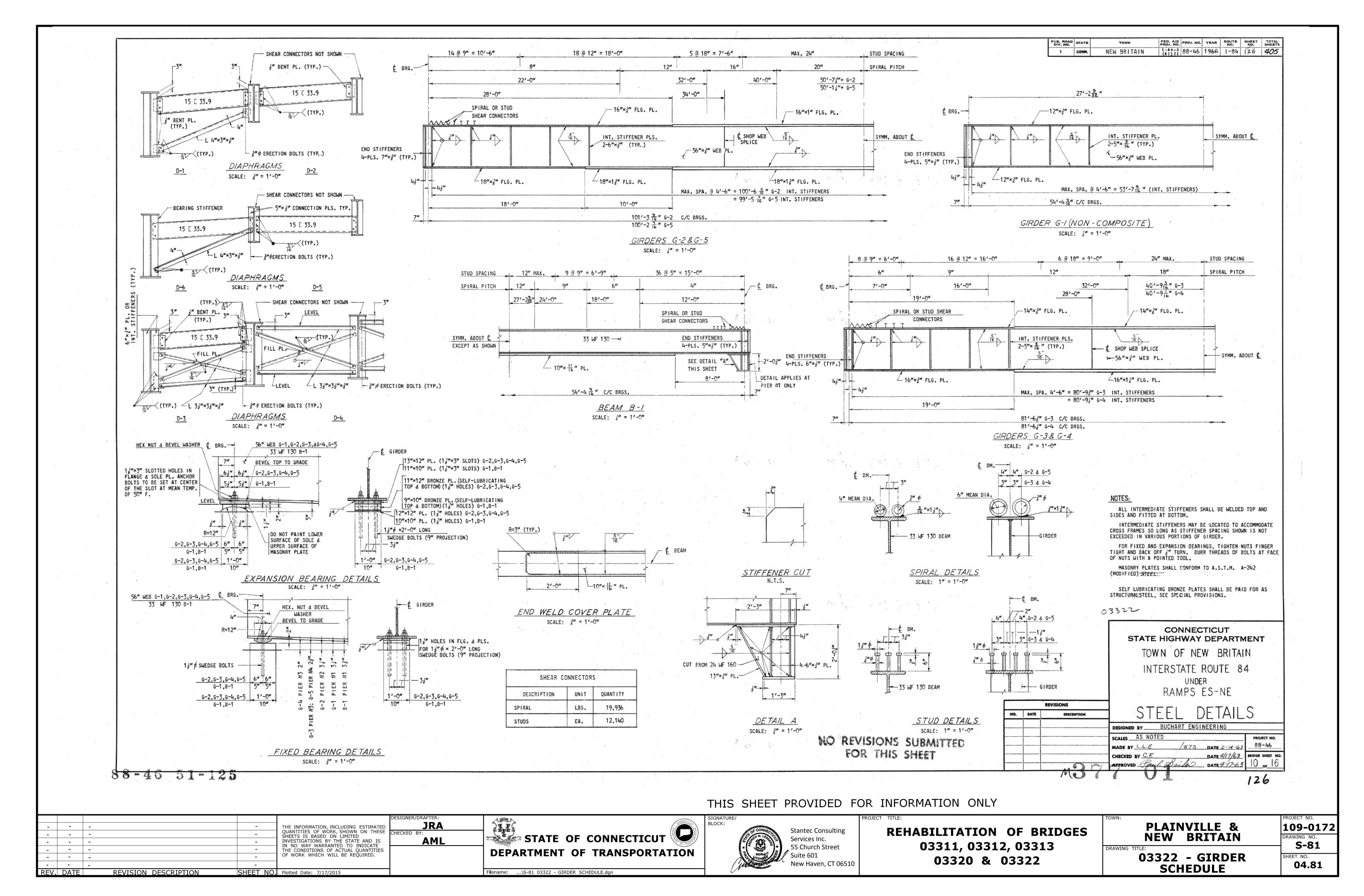
1. THE DETERIORATION AND REPAIR DIMENSIONS SHOWN HEREIN ARE BASED ON LIMITED FIELD OBSERVATIONS AND BRIDGE SAFETY AND INSPECTION REPORTS DATED MAY 20, 2014 BY PENNONI ASSOCIATES. THE INFORMATION IS INTENDED TO BE USED AS A GUIDE AND DOES NOT NECESSARILY REFLECT THE CURRENT CONDITION OF THE STRUCTURE. THE EXACT LOCATION AND LIMITS OF DETERIORATION TO BE REPAIRED AND THE PROPOSED REPAIR DETAIL SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

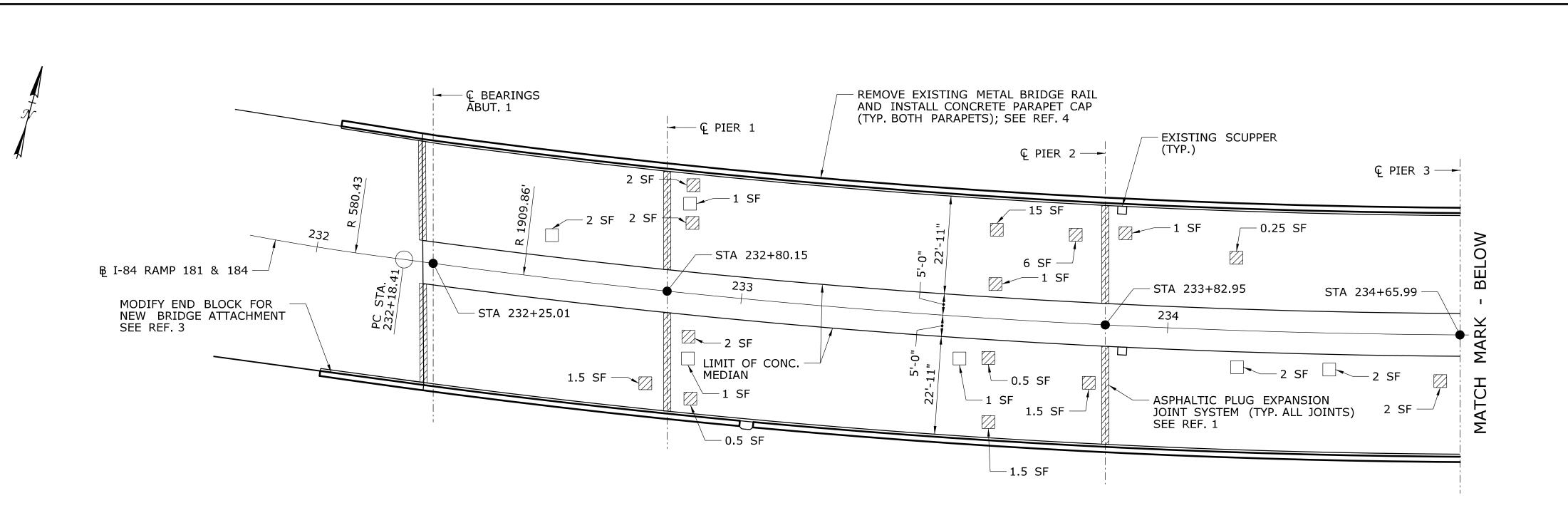
PLAN - SPANS 4 & 5

SCALE: $\frac{1}{8}$ " = 1'-0"

| TYPE | STEEL REPAIR | REF. |
|------|-------------------------------|------|
| G1 | GIRDER BOTTOM FLANGE REPAIR | S-91 |
| G2 | GIRDER WEB REPAIR | S-92 |
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| CF1 | CROSS-FRAME CONNECTION REPAIR | S-92 |
| EB1 | ELASTOMERIC BEARING REPAIR | S-93 |

| | | | DESIGNER/DRAFTER: | A SOUTH A SOUT | SIGNATURE/ | PROJECT TITLE: | TOWN: | PROJECT NO. |
|----|---------|--|--|--|----------------------------------|---------------------------|-----------------|-------------|
| | - | - THE INFORMAT | MATION, INCLUDING ESTIMATED JRA | | BLOCK: Stantoc Consulting | CTATE DROJECT NO 100 173 | PLAINVILLE & | 109-0172 |
| | - | QUANTITIES OF SHEETS IS BASE | BASED ON LIMITED CHECKED BY: | STATE OF CONNECTICUT | Stantec Consulting Services Inc. | STATE PROJECT NO. 109-172 | NEW BRITAIN | DRAWING NO. |
| L | - | - INVESTIGATION | IONS BY THE STATE AND IS (WARRANTED TO INDICATE | STATE OF CONNECTICOT | Sel Vices IIIc. | REHABILITATION OF | INEW DIXITALIN | S-80 |
| | - | - THE CONDITION | TIONS OF ACTUAL QUANTITIES | DEPARTMENT OF TRANSPORTATION | * So Church Street | KENADILITATION OF | DRAWING TITLE: | 5 00 |
| | - | _ OF WORK WHICE | VHICH WILL BE REQUIRED. | DEPARTMENT OF TRANSPORTATION | Suite 601 | FIVE BRIDGES | 03322 - FRAMING | SHEET NO. |
| L- | _ | | | | New Haven, CT 06510 | I TAT DEIDGE2 | | 04.80 |
| RE | V. DATI | E REVISION DESCRIPTION SHEET NO. Plotted Date: 7 | e: 7/17/2015 Fi | Filename:\S-80 03322 - FRAMING PLAN - 2.dgn | <i>U</i> * | | PLAN - 2 | |





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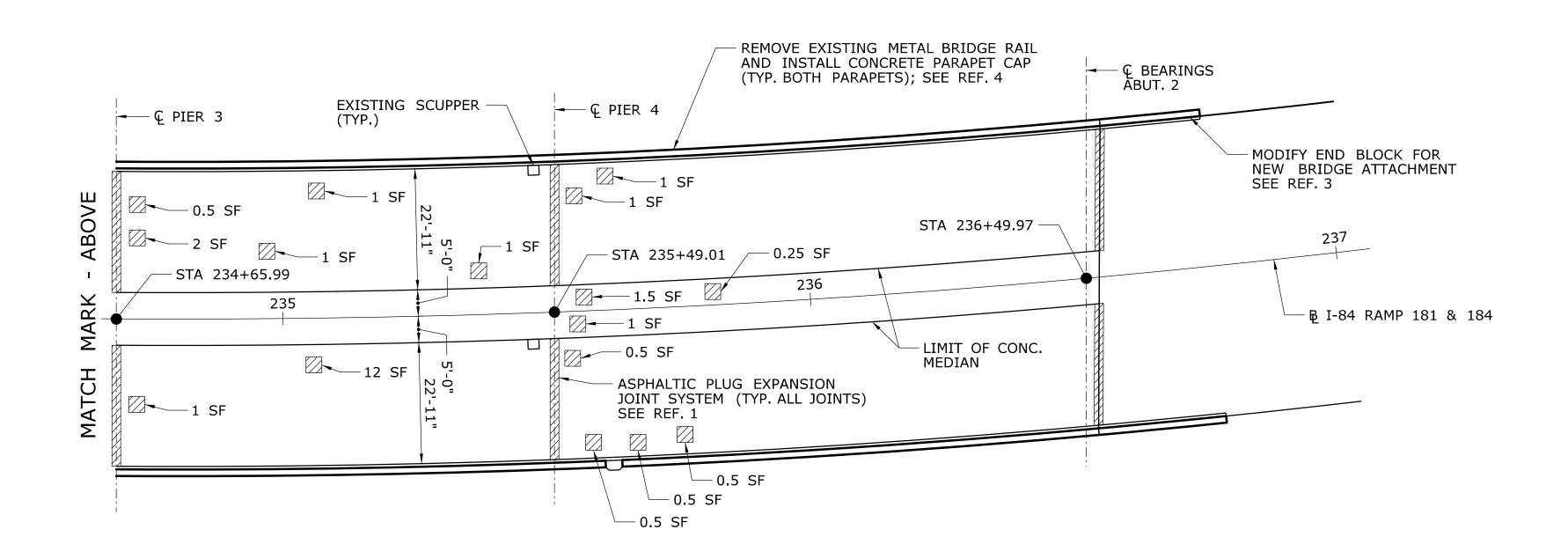
1. ASPHALTIC PLUG EXP. JT. DETAILS S-85
2. DECK REPAIR DETAILS S-84
3. END BLOCK MODIFICATION DETAILS S-88

S-86

4. PARAPET MODIFICATION DETAILS

PLAN - SPANS 1, 2 & 3

SCALE: 1/16" = 1'-0"



NOTES

REV. DATE

- REMOVE EXISTING HMA WEARING SURFACE AND MEMBRANE ON DECK AND APPROACH SLABS, AND INSTALL NEW HMA WEARING SURFACE ON NEW MEMBRANE WATERPROOFING.
- 2. AFTER REMOVAL OF THE EXISTING HMA WEARING SURFACE, REPAIR AREAS OF DETERIORATED CONCRETE ENCOUNTERED AFTER MILLING OPERATIONS HAVE BEEN COMPLETED.

REVISION DESCRIPTION

CONCRETE DETERIORATION LEGEND

SPALL

SHEET NO. Plotted Date: 7/17/2015

HOLLOW CONCRETE

PLAN - SPANS 4 & 5

SCALE: $\frac{1}{16}$ " = 1'-0"

| - | - | - | - | THE INFORMATION, INCLUDING ESTIMATION |
|---|---|---|---|---|
| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THE: SHEETS IS BASED ON LIMITED |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| - | • | - | - | THE CONDITIONS OF ACTUAL QUANTITIE |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
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| CHECKED BY: AML | STATE OF CONNECTICUT |
| | DEPARTMENT OF TRANSPORTATION |
| | |

Filename: ...\S-82 03322 - DECK PLAN & DETAILS.dgn

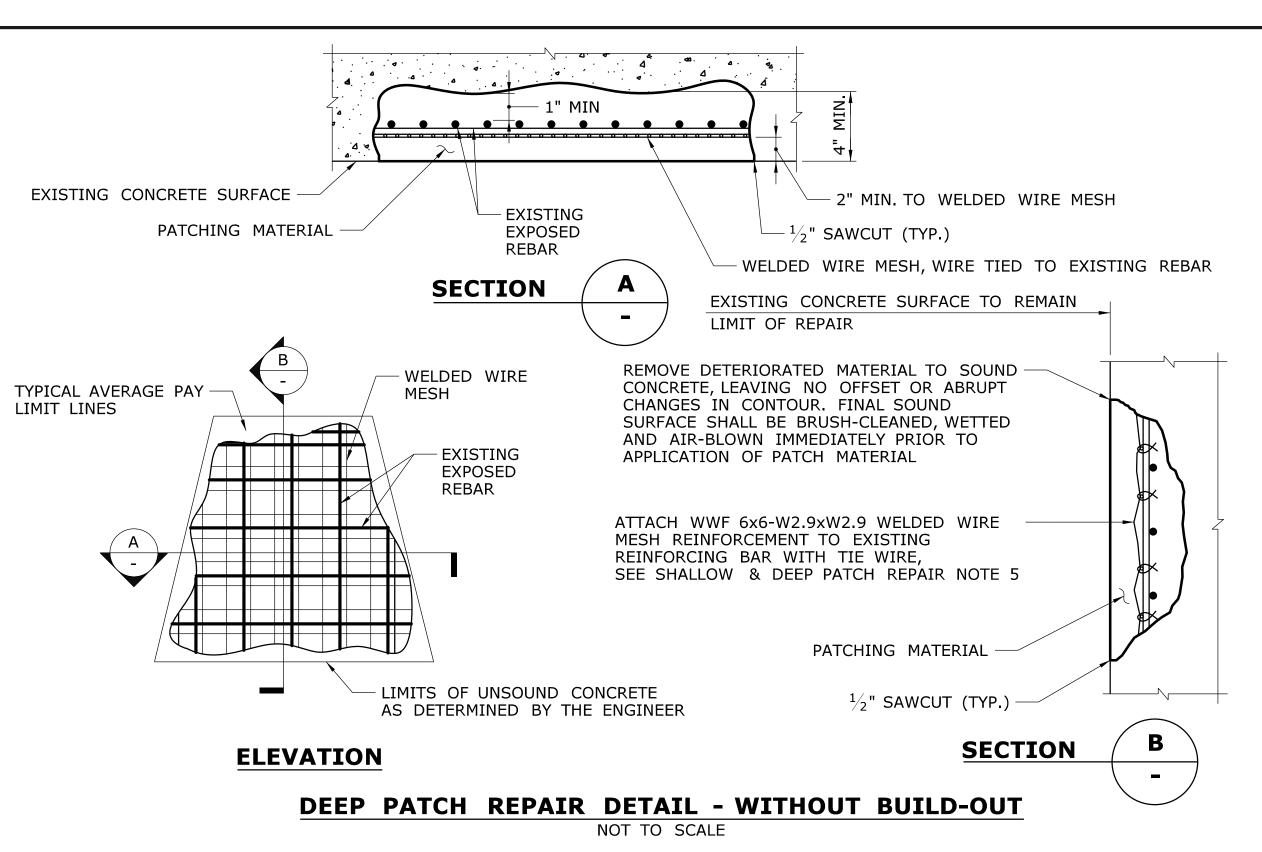


REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

| TOWN: | | | |
|---------|---------|---------|----------|
| | | [NVILLE | |
| | IN E VV | BRITA | 7 |
| DRAWING | TITLE | | |

O3322 - DECK PLAN & DETAILS

109-0172 DRAWING NO. S-82 SHEET NO. 04.82



SHALLOW PATCH REPAIR PROCEDURE:

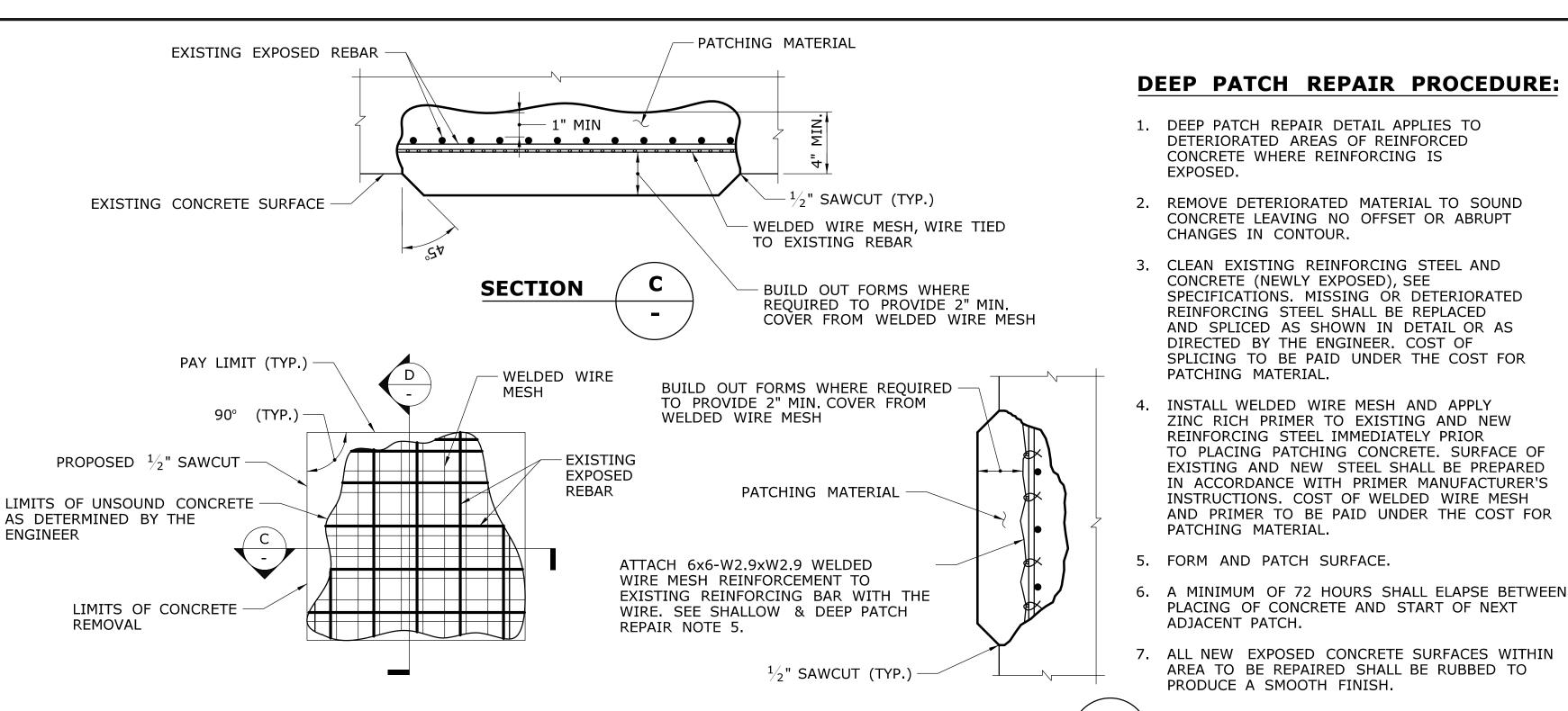
- 1. SHALLOW PATCH REPAIR DETAIL APPLIES TO DETERIORATED AREAS OF UNREINFORCED CONCRETE OR REPAIR AREAS WHERE NO REINFORCING IS EXPOSED,
- 2. REPAIR DEPTH SHALL BE $\frac{1}{8}$ " (MIN.) OR GREATER. REPAIR DEPTHS LESS THAN $\frac{1}{8}$ " NEED NOT BE REPAIRED.
- 3. FOR AREAS WHERE THE CONCRETE REPAIR EXCEED 4" IN DEPTH, A SINGLE LAYER OF WIRE MESH SHALL BE USED TO REINFORCE EACH 2" THICKNESS OF PATCHING MATERIAL. THE COST OF WELDED WIRE MESH SHALL BE INCLUDED IN THE COST OF PATCHING MATERIAL
- 4. THE PERIMETER OF EACH DETERIORATED AREA SHALL BE SQUARED-OFF BY CHISELING OR SAWCUTTING.
- 5. SURFACE PREPARATION:

REMOVE LOOSE AND DETERIORATED CONCRETE, INCLUDING DIRT, OIL, GREASE, AND ALL BOND-INHIBITING MATERIALS FROM SURFACE, LEAVING NO OFFSET OR ABRUPT CHANGES IN CONTOUR. SURFACE PREPARATION SHALL BE DONE BY SCABBLER, CHISELING, WIRE BRUSHING OR OTHER APPROPRIATE MECHANICAL MEANS.

ROUGHEN CONTACT SURFACE WITH A MINIMUM PROFILE OF APPROXIMATELY $\frac{1}{16}$ " FOR BONDING WITH PATCHING MATERIAL.

SATURATE WITH CLEAN WATER PRIOR TO APPLYING MORTAR. SUBSTRATE SHOULD BE SATURATED SURFACE DRY (SSD) WITH NO STANDING WATER DURING APPLICATION OF PATCHING MORTAR.

- 6. HOOK-TYPE EXPANSION ANCHOR BOLTS SHALL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH ASTM B695, CLASS 50, TYPE 1. COST OF HOOK-TYPE BOLTS, INCLUDING MATERIAL AND INSTALLATION, SHALL BE INCLUDED IN THE COST OF PATCHING MATERIAL.
- 7. NEW CONCRETE SHALL MATCH SHAPE AND COLOR OF EXISTING CONRETE SURFACE AS CLOSELY AS POSSIBLE.
- ANCHORS TO SECURE MESH IN THE VICINITY OF THE POST TENSIONING STRANDS SHALL NOT IMPACT THE EXISTING POST TENSIONING STRANDS. IF THERE IS A POSSIBILITY AN ANCHOR MAY IMPACT THE EXISTING POST TENSIONING STRANDS, IT SHALL NOT BE USED.



ELEVATION

DEEP PATCH REPAIR DETAIL - WITH BUILD-OUT

NOT TO SCALE

SHALLOW AND DEEP PATCH REPAIR NOTES:

SECTION

- 1. ALL WORK SHOWN ON THIS DRAWING SHALL BE PERFORMED WHERE DIRECTED BY THE ENGINEER.
- 2. DEEP PATCH REPAIRS SHALL BE PAID UNDER ITEM CLASS "S" CONCRETE. SHALLOW PATCH REPAIRS SHALL BE PAID UNDER ITEM "VARIABLE DEPTH PATCH." SEE SPECIAL PROVISIONS.
- 3. SURFACE PREPARATION, PROPORTIONING AND MIXING OF MATERIALS, APPLICATION OF MATERIALS AND REPAIR PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- NEW CONCRETE PATCHES SHALL MATCH SHAPE OF EXISTING CONCRETE SURFACE. COLOR OF NEW PATCH CONCRETE SHALL MATCH COLOR OF THE ADJACENT SURFACES AS
- 5. EXPOSED REINFORCING BARS SHALL BE BLAST CLEANED AND COATED WITH A ZINC RICH PRIMER THAT CONFORMS TO FEDERAL SPECIFICATION TT-P-641, TYPE 1, BEFORE APPLYING THE PATCHING MATERIAL, COST OF PRIMER SHALL BE INCLUDED IN THE COST OF THE PATCHING MATERIAL ITEM.
- 6. SPLICED REINFORCING BARS AND WIRE MESH SHALL BE COATED WITH A ZINC RICH PRIMER THAT CONFORMS TO FERERAL SPECIFICATIONS TT-P-641, TYPE 1, BEFORE APPLYING PATCHING MATERIAL. SURFACE OF EXISTING AND NEW STEEL SHALL BE PREPARED IN ACCORDANCE WITH PRIMER MANUFACTURER'S INSTRUCTIONS, COST OF PRIMER SHALL BE INCLUDED IN THE COST OF THE PATCHING MATERIAL.
- 7. THE REMOVAL OF DETERIORATED CONCRETE SHALL PROCEED AS DIRECTED BY THE ENGINEER. IF THE REMOVAL OF DETERIORATED CONCRETE BECOMES EXCESSIVE, THE REMOVAL WORK SHALL BE STOPPED AT THAT LOCATION AND THE ENGINEER NOTIFIED IMMEDIATELY. COST OF REMOVAL OF DETERIORATED CONCRETE AND SURFACE PREPARATION OF THE REPAIR AREA SHALL BE INCLUDED IN THE APPROPRIATE PAY ITEM OF THE PATCHING MATERIAL.
- 8. THE CONTRACTOR SHALL NOT REMOVE CONCRETE EXCEPT IN THE PRESENCE OF THE ENGINEER OR HIS APPOINTED REPRESENTATIVE. IF THE AREA REMOVED EXCEEDS THE AREAS SHOWN ON THE PLANS BY 25%, OR IF THE REMOVAL DEPTH EXTENDS MORE THAN $1\frac{1}{2}$ " BEHIND THE MAIN REINFORCING BARS, THE CONTRACTOR SHALL CEASE REMOVAL OPERATIONS AND NOTIFY THE ENGINEER IMMEDIATELY. THE ENGINEER SHALL DETERMINE IF THE REMOVAL OPERATIONS REDUCE THE STRUCTURAL CAPACITY OF THE ELEMENT.
- 9. AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION UNLESS OTHERWISE NOTED OR AS ORDERED BY THE ENGINEER.
- 10. REPAIR DETAILS APPLY TO SPALLED, SCALED AND HOLLOW AREAS IN ABUTMENTS AND PIERS WHERE REQUIRED AND NOTED ON DRAWINGS, AND AS ORDERED BY THE ENGINEER.
- 11. CONCRETE REMOVAL AND REPAIR SHALL NOT IMPACT EXISTING POST TENSIONING STRANDS. SEE NOTES ON DWG. S-09.

TABLE A SIZE AND SPACING OF HOOK-TYPE BOLTS THICKNESS OF SIZE AND SPACING PATCH MAT'L ∕2" DIA. AT 24" ± CTRS. 5" ± ²" DIA. AT 22" ± CTRS.

REVISION DESCRIPTION

EXISTING SURFACE (TYP.) -

SURFACE PREPARATIOIN,

6x6-W2.9xW2.9 WELDED WIRE MESH

MORTAR PATCHING MATERIAL

REPAIR SURFACE TO MATCH EXISTING

6" ±

REV. DATE

2" MIN. WHERE REQUIRED

 $\frac{1}{8}$ "- $\frac{1}{2}$ " MIN. REQUIRED

REPAIR EDGE (TYP.)

∕₂" DIA. AT 20" ± CTRS.

DEPTH OF SPALLING, SCALING

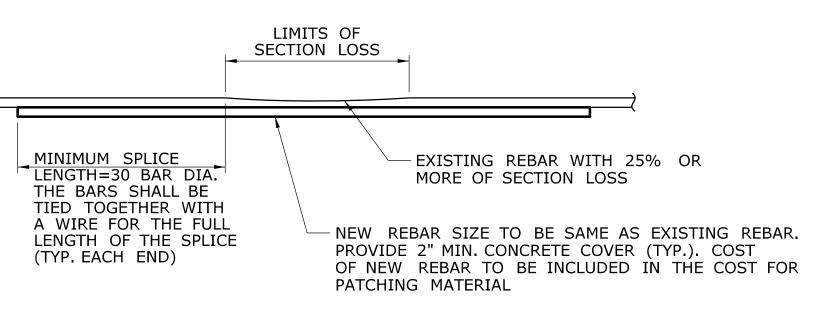
OR UNSOUND MATERIAL

HOOK-TYPE EXPANSION ANCHOR WHERE

WHERE REQUIRED, SEE NOTE 3

REQUIRED, SEE NOTE 6 & TABLE A

SEE NOTE 5



LAPPED TIED SPLICE BAR

REINFORCEMENT SPLICE DETAIL

NOT TO SCALE

SHALLOW PATCH REPAIR DETAIL NOT TO SCALE

SHEET NO. Plotted Date: 7/17/2015

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS - | - | -- | - | -IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. _ | - | -- - -- | - | -

JRA **AML**





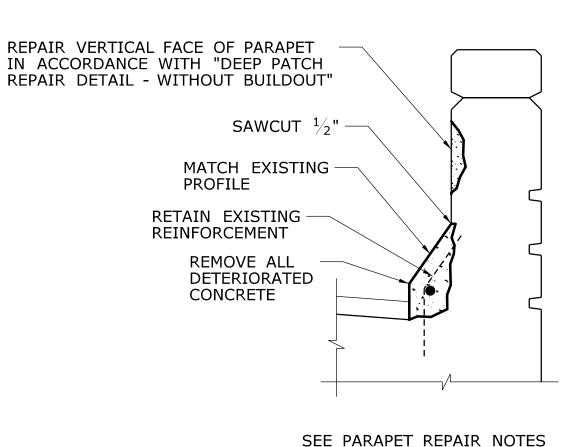
STATE PROJECT NO. 109-172 **REHABILITATION OF**

PLAINVILLE & **NEW BRITAIN**

DRAWING TITLE: **CONCRETE REPAIR** 109-0172 DRAWING NO. **S-83** HEET NO.

04.83

FIVE BRIDGES New Haven, CT 06510 **DETAILS - 1** Filename: ...\S-83 CONCRETE REPAIR DETAILS - 1.dgn



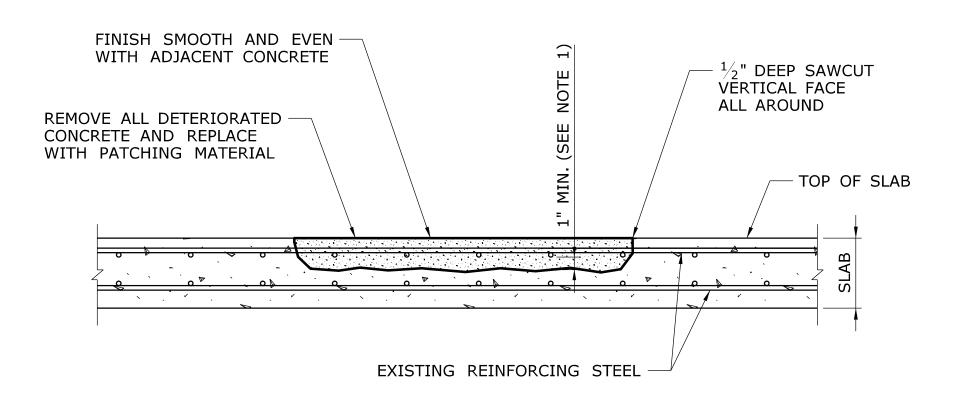
PARAPET REPAIR DETAIL

NOT TO SCALE

EXISTING BITUMINOUS CONCRETE EXISTING WATERPROOF MEMBRANE EXPOSED REINFORCING STEEL TO BE THOROUGHLY CLEANED AND COATED WITH EPOXY RESIN SYSTEM (SEE SPECIAL PROVISION - SURFACE PATCH) HOLLOW SOUNDING AREAS OF CONCRETE TO BE DETERMINED IN THE FIELD AND REMOVED AS DIRECTED BY THE ENGINEER (SEE DECK UNDERSIDE REPAIR NOTES 6 AND 8)

SURFACE PATCH REPAIR DETAILS

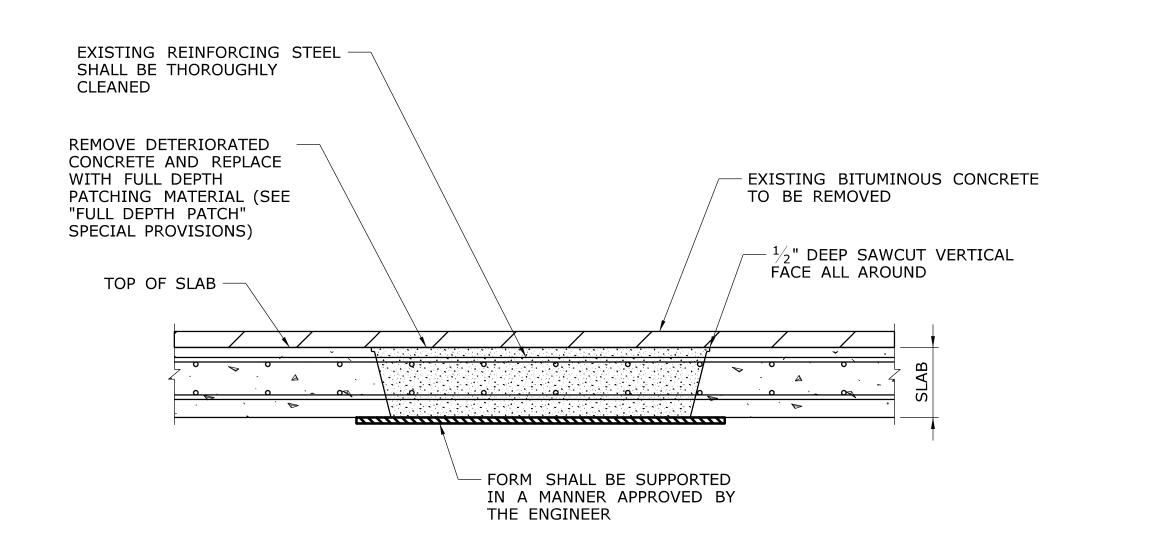
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PATCH BELOW TOP REINFORCING STEEL

PARTIAL DEPTH PATCH REPAIR DETAILS

NOT TO SCALE



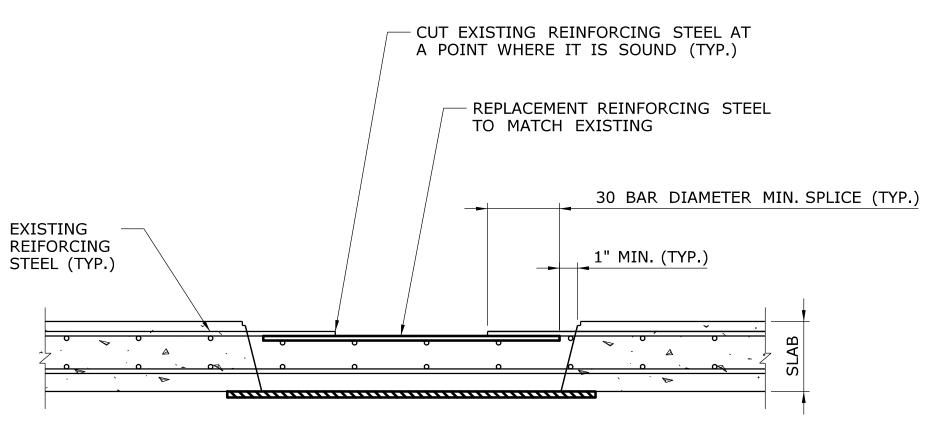
FULL DEPTH PATCH REPAIR DETAIL

NOT TO SCALE

SHEET NO. Plotted Date: 7/17/2015

IN NO WAY WARRANTED TO INDICATE

THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.



NOTE: APPLIES TO BOTH "PARTIAL DEPTH PATCH" AND "FULL DEPTH PATCH"

DEFECTIVE REINFORCING STEEL REPAIR

NOT TO SCALE

DECK UNDERSIDE REPAIR NOTES:

- 1. EPOXY COATING THE DECK UNDERSIDE REINFORCEMENT SHALL BE PERFORMED IN ACCORDANCE WITH DETAILS SHOWN ON THIS SHEET AND THE SPECIAL PROVISIONS. THIS WORK SHALL PAID UNDER THE ITEM "SURFACE PATCH" (SEE SPECIAL PROVISIONS).
- 2. ALL WORK SHALL BE CONTAINED BY A TEMPORARY DEBRIS SHIELD DESIGNED BY THE CONTRACTOR IN CONFORMANCE WITH THE APPLICABLE SECTIONS OF FORM 816. THE COST OF THIS SHALL BE INCLUDED IN THE GENERAL COST OF CONSTRUCTION.
- 3. THE EXISTING SLAB UNDERSIDE SHALL BE SOUNDED FOR HOLLOW AREAS OF CONCRETE TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL PROVIDE SAFE ACCESS TO THE ENGINEER FOR DELINEATION AND INSPECTION OF THE DECK UNDERSIDE, AND THE REPAIR WORK. THE COST OF PROVIDING ACCESS FOR THE INSPECTION SHALL BE INCLUDED IN THE COST OF THE ITEM "SURFACE PATCH."
- 4. ALL EXPOSED REINFORCING STEEL SHALL BE THOROUGHLY CLEANED TO REMOVE ANY DEBRIS OR RESIDUE BEFORE APPLYING THE EPOXY RESIN COATING (SEE SPECIAL PROVISION).
- 5. ANY EXPOSED REINFORCING STEEL IN THE AREAS OF POP-OUTS CAUSED BY THE REMOVAL OF DETERIORATED CONCRETE SHALL BE CLEANED AND COATED WITH EPOXY RESIN COATING.
- 6. THE DECK UNDERSIDE DETERIORATION AND REPAIR ESTIMATES ARE BASED ON LIMITED FIELD OBSERVATIONS AND BRIDGE SAFETY INSPECTION REPORTS. THE EXACT LOCATION AND LIMITS OF EXPOSED REINFORCEMENT AND HOLLOW AREAS OF CONCRETE IN THE DECK UNDERSIDE SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION (SEE SPECIAL PROVISIONS).
- 7. THE CONTRACTOR SHALL NOT PERFORM ANY REPAIR WORK WITHOUT PRIOR APPROVAL FROM THE ENGINEER. THE REMOVAL OF DETERIORATED CONCRETE SHALL PROCEED AS DIRECTED BY THE ENGINEER.
- 8. THE PRIMARY INTENDED REPAIR IS TO APPLY EPOXY RESIN COATING TO THE UNDERSIDE OF THE DETERIORATED DECK SURFACE. IF THE REMOVAL OF DETERIORATED CONCRETE EXTENDS GREATER THAN 3 INCHES IN DEPTH, OR IF THE REMOVAL EXPOSES THE FULL CIRCUMFERENCE OF THE REINFORCING STEEL BAR FOR A LENGTH EXCEEDING 12 INCHES, THE WORK SHALL BE STOPPED AND THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. THESE AREAS SHALL BE REPAIRED BY "FULL DEPTH PATCHING" AS DIRECTED BY THE ENGINEER.

CONCRETE PATCHING NOTES:

- 1. IF THE REINFORCING STEEL HAS AT LEAST ONE HALF OF ITS SURFACE AREA EXPOSED AFTER CONCRETE REMOVAL, THE CONCRETE SHALL BE FURTHER REMOVED TO A DEPTH OF 1" BELOW THE STEEL. IN AREAS WHERE REINFORCING STEEL IS ONLY PARTIALLY EXPOSED AFTER REMOVAL OF DETERIORATED CONCRETE, THE REINFORCEMENT SHALL BE COATED WITH EPOXY BONDING COMPOUND (SEE SPECIAL PROVISIONS) BEFORE PLACING "PARTIAL DEPTH PATCH" MATERIAL.
- 2. EXPOSED REINFORCING STEEL IN POP-OUTS CAUSED BY REMOVAL OF DETERIORATED CONCRETE SHALL BE PROTECTED WITH EPOXY COATING.
- 3. IF REMOVAL OF DETERIORATED CONCRETE FOR "PARTIAL DEPTH PATCH" EXCEEDS TWO-THIRDS OF THE TOTAL THICKNESS OF THE SLAB, REMOVE THE REMAINDER OF THE CONCRETE TO THE BOTTOM OF THE SLAB AND PERFORM "FULL DEPTH PATCH." FINAL PAYMENT SHALL BE MADE AS "FULL DEPTH PATCH" ONLY (SEE SPECIAL PROVISIONS).
- 4. ADDITIONAL CONCRETE REMOVAL REQUIRED FOR THE REPAIR OF THE REINFORCING STEEL SHALL BE PAID FOR UNDER THE ITEM "FULL DEPTH PATCH" OR " PARTIAL DEPTH PATCH", WHICHEVER CONDITION APPLIES.
- 5. AT FULL DEPTH PATCH LOCATIONS, REMOVE SOUND CONCRETE AS REQUIRED TO OBTAIN A MINIMUM SLOPE OF 4:1 (V:H).

PARAPET REPAIR NOTES

- 1. ALL PARAPET REPAIR WORK SHALL BE PERFORMED WHERE DIRECTED BY THE ENGINEER.
- 2. PARAPET REPAIR WORK SHALL BE PAID FOR UNDER THE ITEM "CLASS "S" CONCRETE". ANY REINFORCEMENT USED FOR PARAPET REPAIR SHALL BE EPOXY COATED.
- 3. SEE SHALLOW AND DEEP PATCH REPAIR NOTES ON S-83 FOR ADDITIONAL REQUIREMENTS.
- 4. PARAPET REPAIR WORK SHALL BE PERFORMED AFTER EXISTING OVERLAY HAS BEEN REMOVED, AND PRIOR TO PLACING OF NEW OVERLAY AND MEMBRANE WATERPROOFING.
- 5. SAWCUT PERIMETER OF ALL EXISTING CONCRETE TO BE REMOVED. SAWCUTTING NOT MEASURED FOR PAYMENT. REMOVE EXISTING CONCRETE TO A DEPTH 1" BEHIND EXISTING STEEL REINFORCEMENT.
- 6. REMOVE DETERIORATED MATERIAL TO SOUND CONCRETE LEAVING NO OFFSET OR ABRUPT CHANGES IN CONTOUR.
- 7. CLEAN EXISTING REINFORCING STEEL AND CONCRETE (NEWLY EXPOSED), SEE SPECIFICATIONS. MISSING OR DETERIORATED REINFORCING STEEL SHALL BE REPLACED AND SPLICED AS SHOWN IN DETAIL OR AS DIRECTED BY THE ENGINEER. COST OF SPLICING TO BE PAID UNDER THE COST FOR PATCHING MATERIAL.
- 8. FORM AND PATCH SURFACE.
- 9. A MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN PLACING OF CONCRETE AND START OF NEXT ADJACENT PATCH.
- 10. ALL NEW EXPOSED CONCRETE SURFACES WITHIN AREA TO BE REPAIRED SHALL BE RUBBED TO PRODUCE A SMOOTH FINISH.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS

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REVISION DESCRIPTION

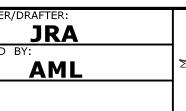
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REV. DATE



STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

Filename: ...\S-84 CONCRETE REPAIR DETAILS - 2.dgn



STATE PROJECT NO. 109-172 REHABILITATION OF FIVE BRIDGES PLAINVILLE & NEW BRITAIN

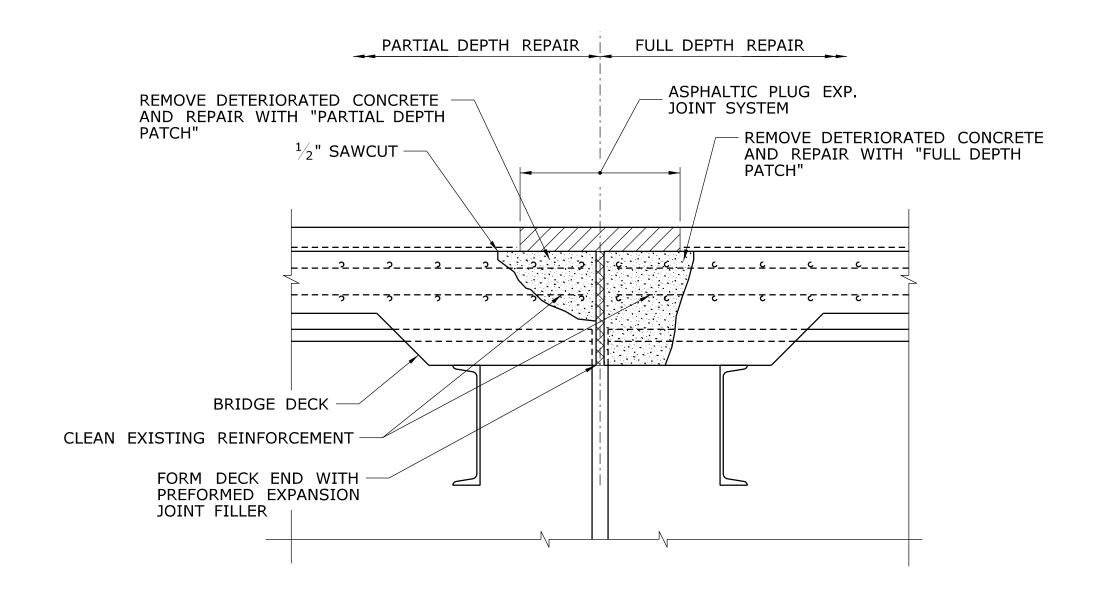
109-0172

DRAWING NO.

S-84

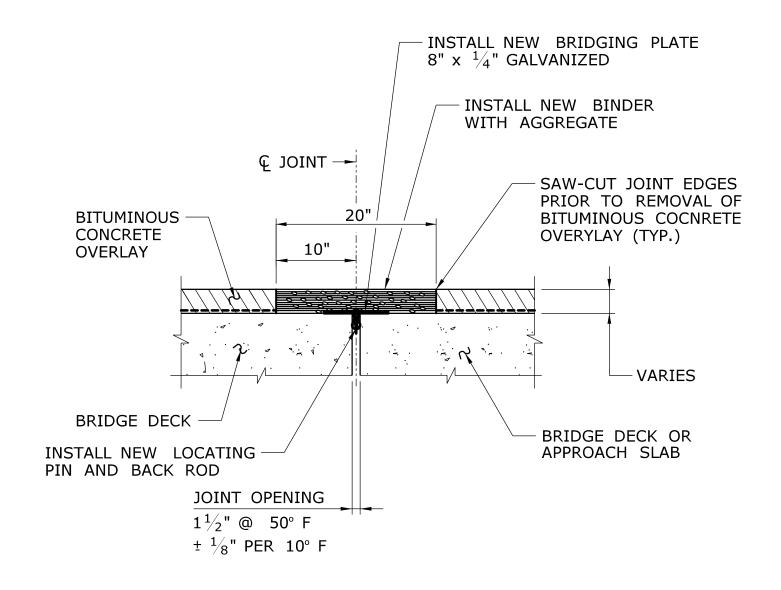
CONCRETE REPAIR DETAILS - 2

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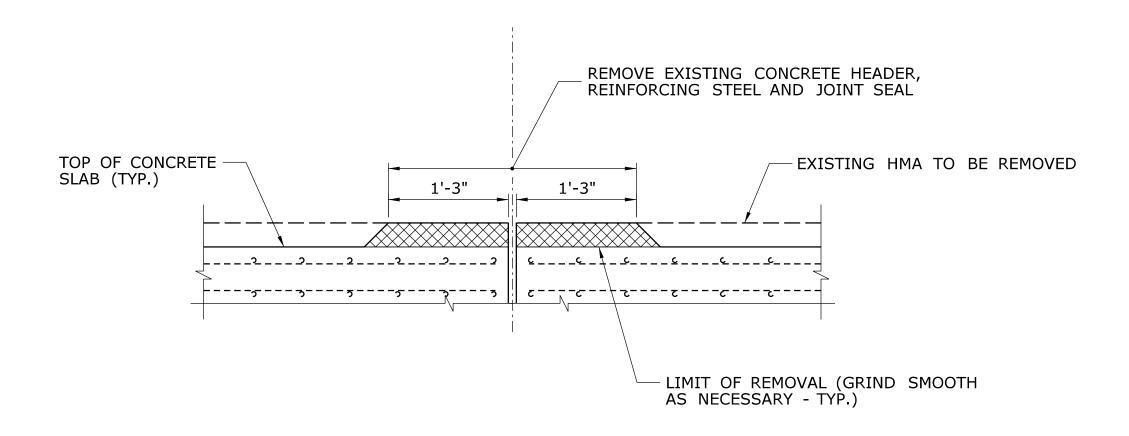
DECK END REPAIR DETAILS

SCALE: 1'' = 1'-0''



ASPHALTIC PLUG EXPANSION JOINT

NOT TO SCALE



DECK JOINT MODIFICATION AT BRIDGE 03312

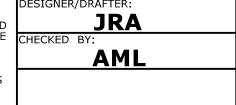
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SHEET NO. Plotted Date: 7/17/2015

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| - | - | - | - | QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED | CHE |
| - | - | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE | |
| _ | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES | |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. | |
| - | - | - | - | | |

REVISION DESCRIPTION

REV. DATE





Filename: ...\S-85 DECK JOINT REPAIR DETAILS.dgn



PROJECT TITLE:

STATE PROJECT NO. 109-172 REHABILITATION OF FIVE BRIDGES

| TOWN: | | | |
|-------|--------|-----------------|--|
| | | VILL BRI | |
| | TITLE. | | |

DECK JOINT REPAIR DETAILS

S-85
SHEET NO.
04.85

109-0172

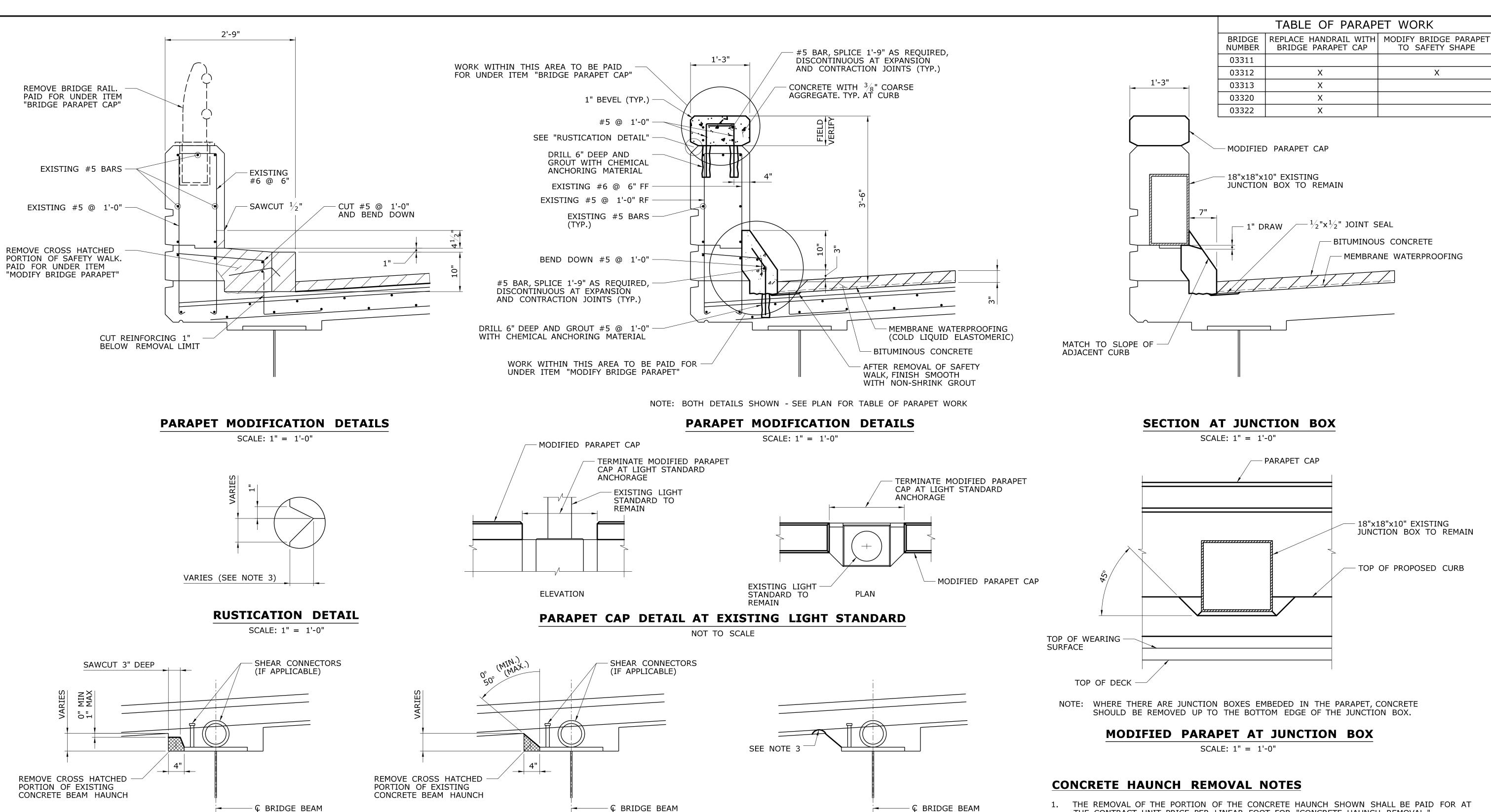
ASPHALTIC PLUG EXPANSION JOINT NOTES:

1. REMOVE NEW BITUMINOUS CONCRETE OVERLAY AND MEMBRANE

WATERPROOFING. REPLACE WITH ASPHALTIC PLUG EXPANSION JOINT SYSTEM. TO BE PAID FOR UNDER THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM" (SEE SPECIAL PROVISIONS).

- 2. REFER TO SPECIAL PROVISIONS FOR TEMPERATURE REQUIREMENTS DURING INSTALLATION OF ASPHALTIC PLUG EXPANSION JOINTS.
- 3. SEALING OF PARAPET JOINTS SHALL BE PAID FOR UNDER THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM."
- 4. SEE TABLE FOR MAXIMUM DESIGN THERMAL MOVEMENT RANGE.
- 5. THE CLOSED CELL BACKER ROAD SHALL BE PLACED A MINIMUM OF 2" FROM THE OUTSIDE FACE OF THE PARAPET.
- 6. THE NON-SAGGING SILICONE SEALANT SHALL BE PLACED ON THE BACKER ROD $^{1}\!\!/_{2}$ " THICK. AT THE GUTTER, THE SILICONE SEALANT SHALL BE PLACED FLUSH WITH THE OUTSIDE FACE OF CONCRETE.
- 7. PRIOR TO INSTALLING SILICONE SEALANT, CLEAN JOINT SIDES BY SANDBLASTING. DUST SHALL BE REMOVED BY THE METHOD APPROVED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR UNDER THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM" (SEE SPECIAL PROVISIONS).

| THERMAL MOVEMENT | | | | |
|------------------|------------|----------------|--|--|
| BRIDGE | LOCATION | MOVEMENT RANGE | | |
| | ABUTMENT 1 | 1" | | |
| | PIER 1 - 2 | 1.0" | | |
| 03311 | PIER 3 | 0" | | |
| | PIER 4 - 5 | 1.0" | | |
| | ABUTMENT 2 | 1" | | |
| | ABUTMENT 1 | 7/8" | | |
| | PIER 1 | 1" | | |
| 03312 | PIER 2 | 0" | | |
| | PIER 3 - 7 | 1.0" | | |
| | ABUTMENT 2 | 1" | | |
| | ABUTMENT 1 | 1" | | |
| 02212 | PIER 1 | 0" | | |
| 03313 | PIER 2 - 8 | 1.0" | | |
| | ABUTMENT 2 | 1/2" | | |
| | ABUTMENT 1 | 1" | | |
| 03320 | PIER 1 - 2 | 1.0" | | |
| | ABUTMENT 2 | 1" | | |
| | ABUTMENT 1 | 1/2" | | |
| | PIER 1 | 1" | | |
| 03322 | PIER 2 | 3/4" | | |
| 03322 | PIER 3 | 0" | | |
| | PIER 4 | 3/4" | | |
| | ABUTMENT 2 | 1" | | |



- 1. THE REMOVAL OF THE PORTION OF THE CONCRETE HAUNCH SHOWN SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR "CONCRETE HAUNCH REMOVAL."
- 2. THIS METHOD TO BE USED ONLY IN THOSE AREAS HAVING INSUFFICIENT CLEARANCE FOR SAW-CUTTING EQUIPMENT SUCH AS ABOVE SOME DIAPHRAGMS AS ORDERED BY THE ENGINEER.
- IF OVER-REMOVAL RESULTS, APPLY TWO COATS OF EPOXY RESIN TO DECK REINFORCING STEEL EXPOSED DURING HAUNCH REMOVAL. ALL REASONABLE PRECAUTIONS SHALL BE TAKEN TO AVOID THIS CONDITION.

DETAILS FOR CONCRETE HAUNCH REMOVAL

SHEET NO. Plotted Date: 7/17/2015

SCALE: 1'' = 1'-0''

- -

- | -

REVISION DESCRIPTION

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REV. DATE

DETAILS FOR CONCRETE HAUNCH REMOVAL - INACCESSIBLE LOCATIONS*

SCALE: 1'' = 1'-0''

*SEE NOTE 2

STATE OF CONNECTICUT **JRA** THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. **AML DEPARTMENT OF TRANSPORTATION**

EXISTING CONDITION



FINAL CONDITION

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

PLAINVILLE & **NEW BRITAIN**

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TO SAFETY SHAPE

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- BITUMINOUS CONCRETE

MEMBRANE WATERPROOFING

18"x18"x10" EXISTING

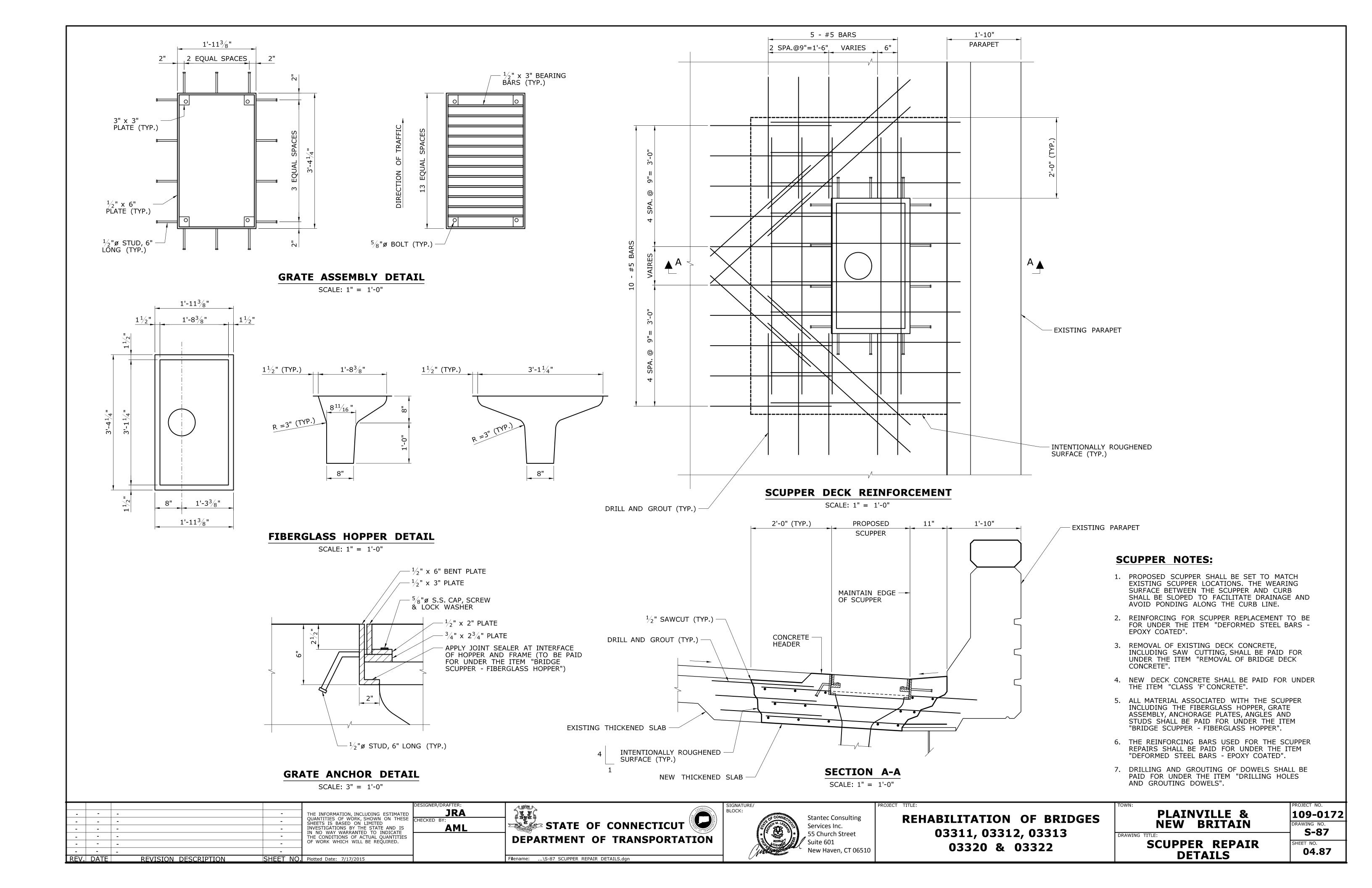
— TOP OF PROPOSED CURB

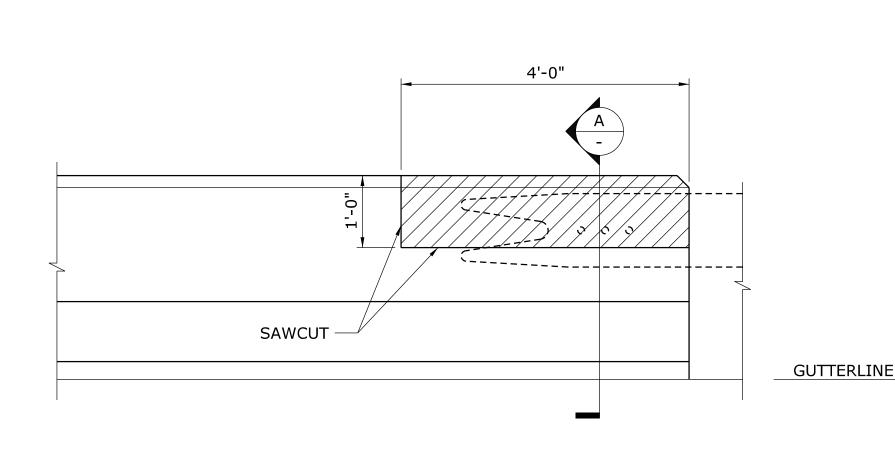
JUNCTION BOX TO REMAIN

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PARAPET & HAUNCH New Haven, CT 06510 **MODIFICATION DETAILS** Filename: ...\S-86 PARAPET & HAUNCH MODIFICATION DETIALS.dgn

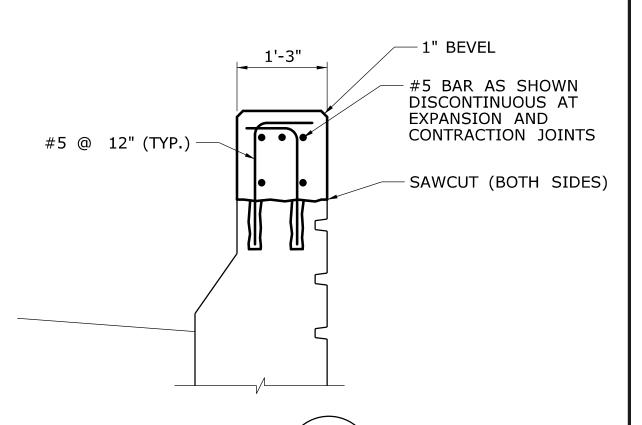




PAYLIMIT FOR BRIDGE PARAPET CAP PAYLIMIT FOR MODIFY BRIDGE PARAPET SEE PARAPET MOD. NOTE 4 4'-0" 0 __________

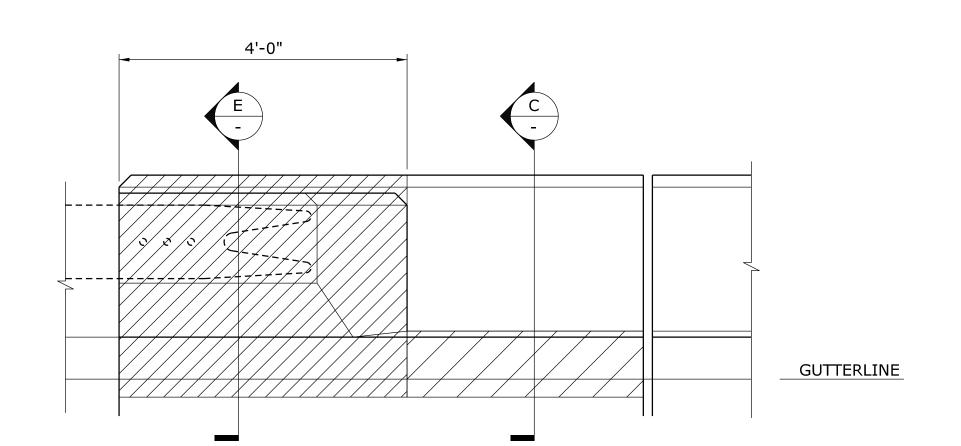
REMOVE EXISTING BRIDGE RAIL

SECTION



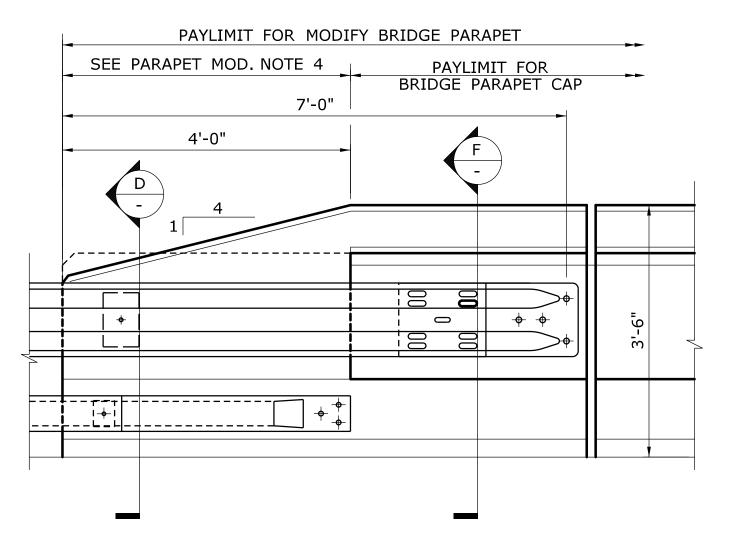
EXISTING BRIDGE ATTACHMENT - TYPE 1

SCALE: $\frac{3}{4}$ " = 1'-0"

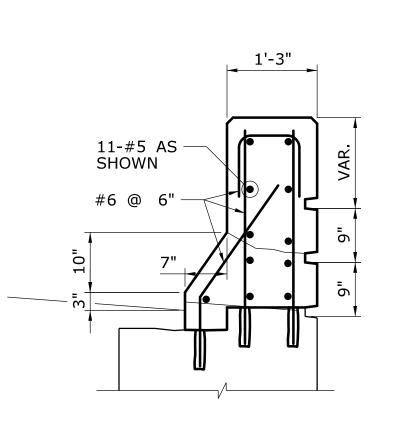




SCALE: $\frac{3}{4}$ " = 1'-0"



REMOVE EXISTING BRIDGE RAIL SAWCUT 1/2" -REMOVE EXISTING SAFETY WALK AND GRANITE CURB



SECTION

EXISTING BRIDGE ATTACHMENT - TYPE 2

SCALE: $\frac{3}{4}$ " = 1'-0"

PROPOSED BRIDGE ATTACHMENT - TYPE 2

SCALE: $\frac{3}{4}$ " = 1'-0"

METAL BEAM RAIL NOTES

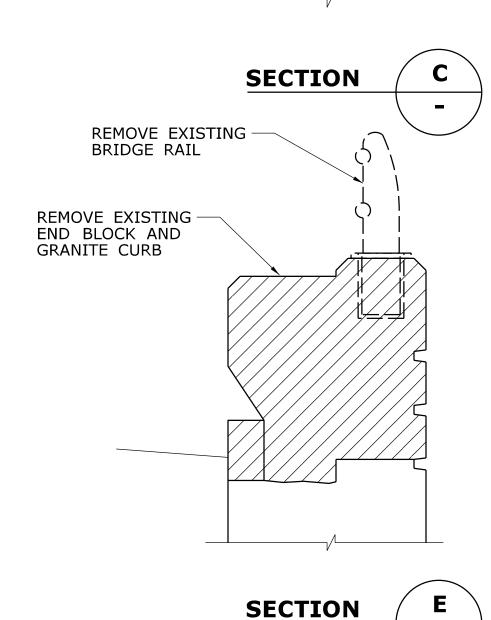
- 1. STEEL PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM
- 2. ANCHOR BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325, MECHANICALLY GALVANIZED.
- 3. 1"ø PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A53 GRADE B OR ASTM A501 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
- 4. ROADWAY ELEMENTS SHALL BE PAID FOR UNDER THE APPLICABLE ROADWAY ITEMS.
- 5. ALL RAIL ANCHORAGE MATERIAL REQUIRED FOR END ATTACHMENTS SHALL BE PAID FOR UNDER THE APPLICABLE ROADWAY ITEMS.
- 6. REFER TO STANDARD SHEETS HW-910_06 "R-B 350 BRIDGE ATTACHMENT TO SAFETY SHAPE PARAPET" FOR ADDITIONAL DETAILS.

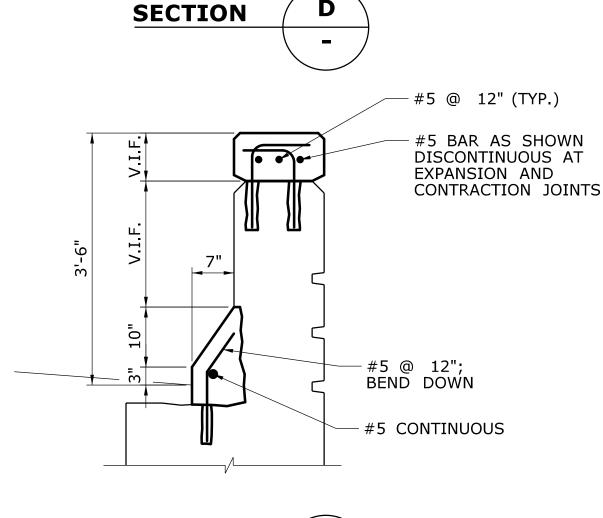
REVISION DESCRIPTION

REV. DATE

PARAPET MODIFICATION NOTES

- 1. CONCRETE FOR ALL PARAPET MODIFICATIONS SHALL BE CONFORM TO THE REQUIREMENTS OF 'CLASS "F" CONCRETE'.
- 2. THE REMOVAL OF THE CONCRETE SAFETY WALK AND GRANITE CURB, SAWCUTTING EXISTING CONCRETE, REMOVAL OF PORTIONS OF THE PARAPET AS INDICATED, DRILLING AND GROUTING DOWELS, FURNISHING AND INSTALLING REINFORCEMENT AND CONCRETE FOR THE RECONSTRUCTED CONCRETE CURBS AND PARAPETS SHALL BE PAID FOR UNDER THE ITEM "MODIFY BRIDGE PARAPET"
- 3. REMOVAL OF THE METAL BRIDGE RAIL, DRILLING AND GROUTING DOWELS, FURNISHING AND INSTALLING REINFORCEMENT AND CONCRETE FOR THE PARAPET CAP SHALL BE PAID FOR UNDER THE ITEM "BRIDGE PARAPET CAP".
- 4. REMOVAL OF METAL BRIDGE RAIL IN THIS AREA NOT MEASURED FOR PAYMENT, BUT SHALL BE INCLUDED IN THE OVERALL COST OF





ITEM "BRIDGE PARAPET CAP".

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - | - | -- | - | -_ | - | -- - -- | - | -

SHEET NO. Plotted Date: 7/17/2015

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REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

PLAINVILLE & **NEW BRITAIN** DRAWING TITLE:

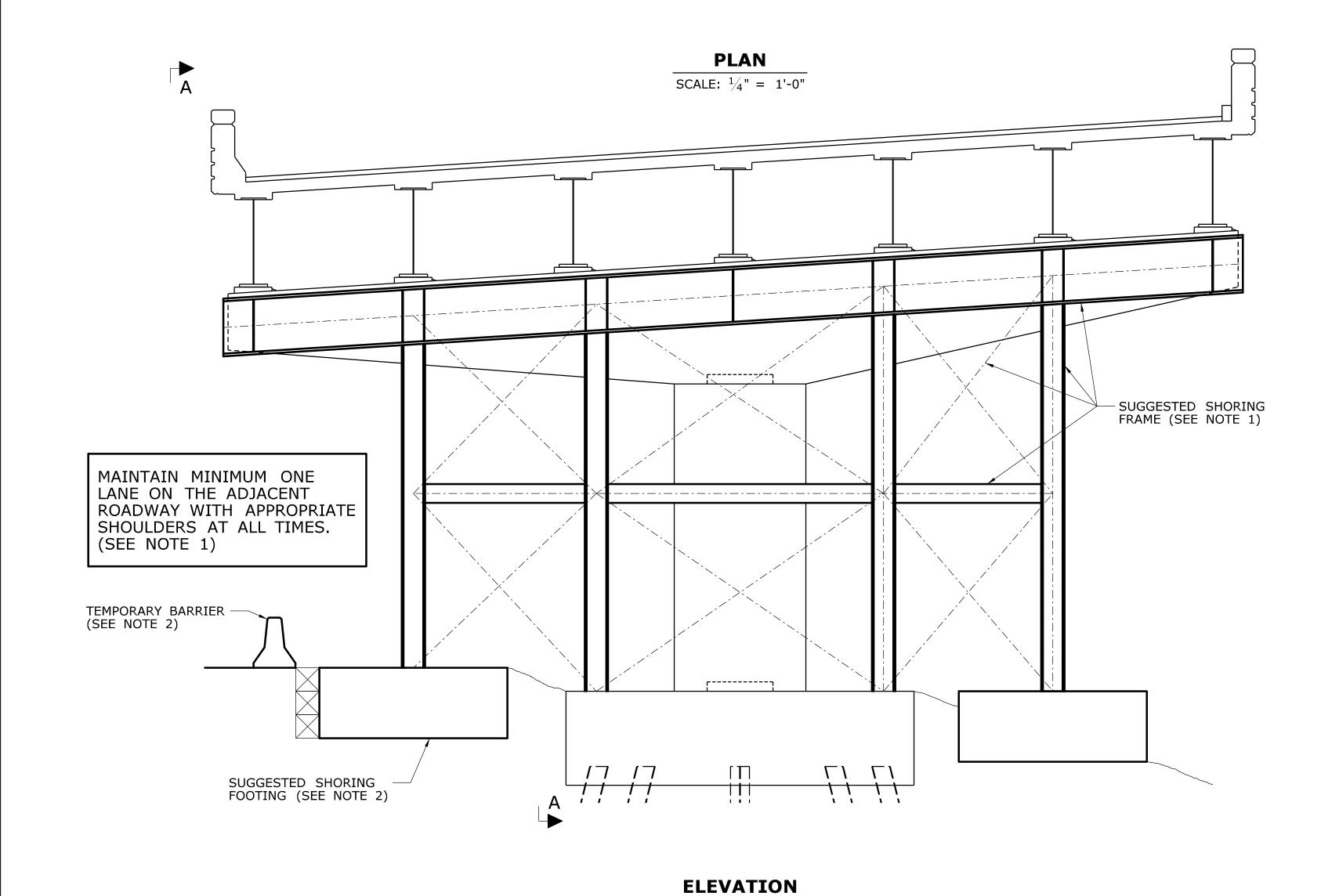
SECTION

TYPICAL APPROACH RAIL DETAILS

DRAWING NO. **S-88** 04.88

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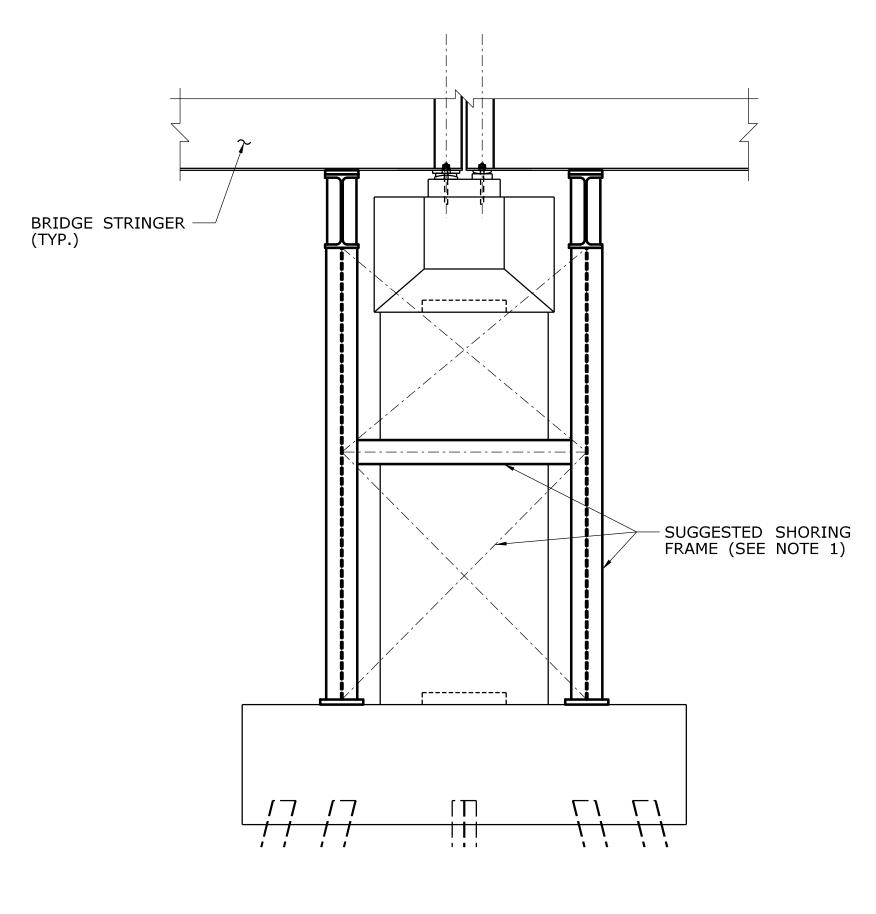
EXISTING PIER PILE CAP (BELOW) ~----\ **...............**



1. THE CONCEPT SHOWN ON THIS DRAWING IS SUGGESTED AND ILLUSTRATES A TEMPORARY SUPPORT CONCEPT WHERE LANE SHIFTS AND/OR LANE CLOSURES OF THE ADJACENT ROADWAY CAN BE UTILIZED. ACTUAL SHORING DESIGN USED TO BE PROVIDED BY THE CONTRACTOR. DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT AND BE SUBMITTED FOR APPROVAL.

NOTES

- 2. AFTER THE SHORING SYSTEM IS NO LONGER REQUIRED, TEMPORARY FOOTINGS, BARRIER, ETC. SHALL BE REMOVED AND PAVEMENT, FILL, RAILING, ETC. THAT WAS DISRUPTED TO INSTALL THE SHORING SYSTEM SHALL BE RESTORED TO ITS PREVIOUS CONDITION.
- CONTRACTOR TO NOTE THAT THE MINIMUM VERTICAL CLEARANCE OVER THE ROADWAY IS 16'-3" (OR EXISTING MINIMUM CLEARANCE, WHICHEVER IS LOWER) AND THE MINIMUM VERTICAL CLEARANCE OVER THE RAILROAD IS 20'-6".



SECTION A-A SCALE: $\frac{1}{4}$ " = 1'-0"

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| | _ | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES | |
| | _ | • | - | - | OF WORK WHICH WILL BE REQUIRED. | |
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SCALE: $\frac{1}{4}$ " = 1'-0"

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: ...\S-89 SUGGESTED TEMPORARY SUPPORT - 1.dgn



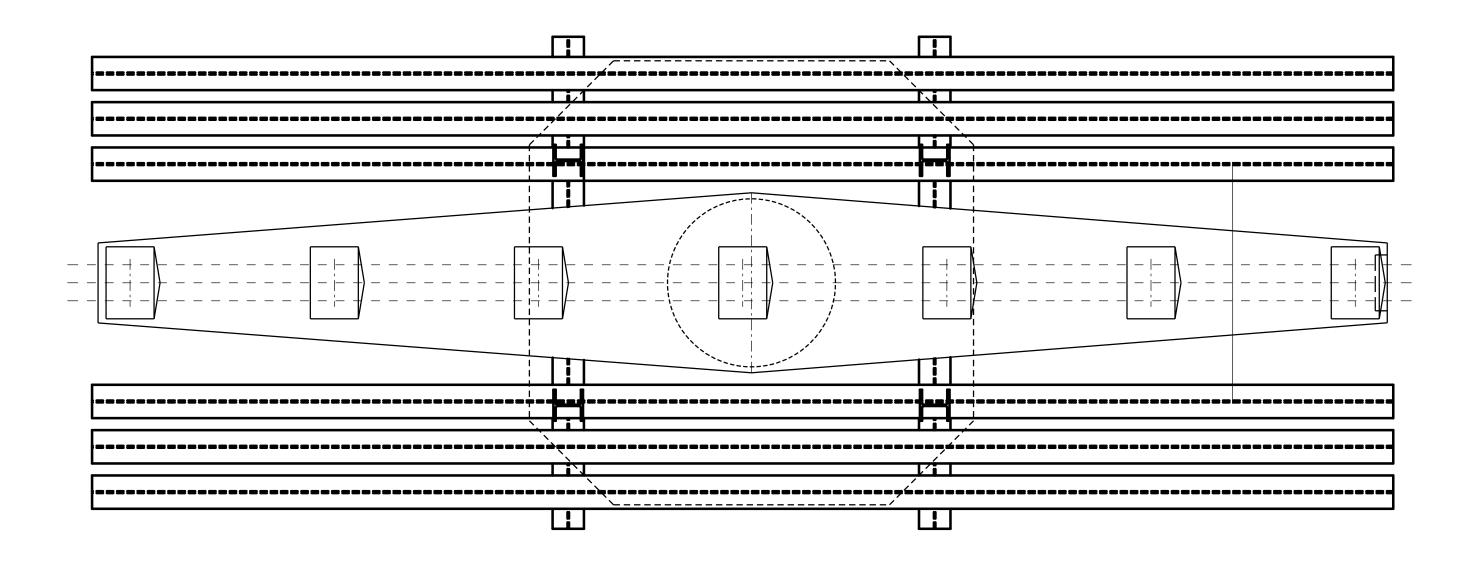
REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

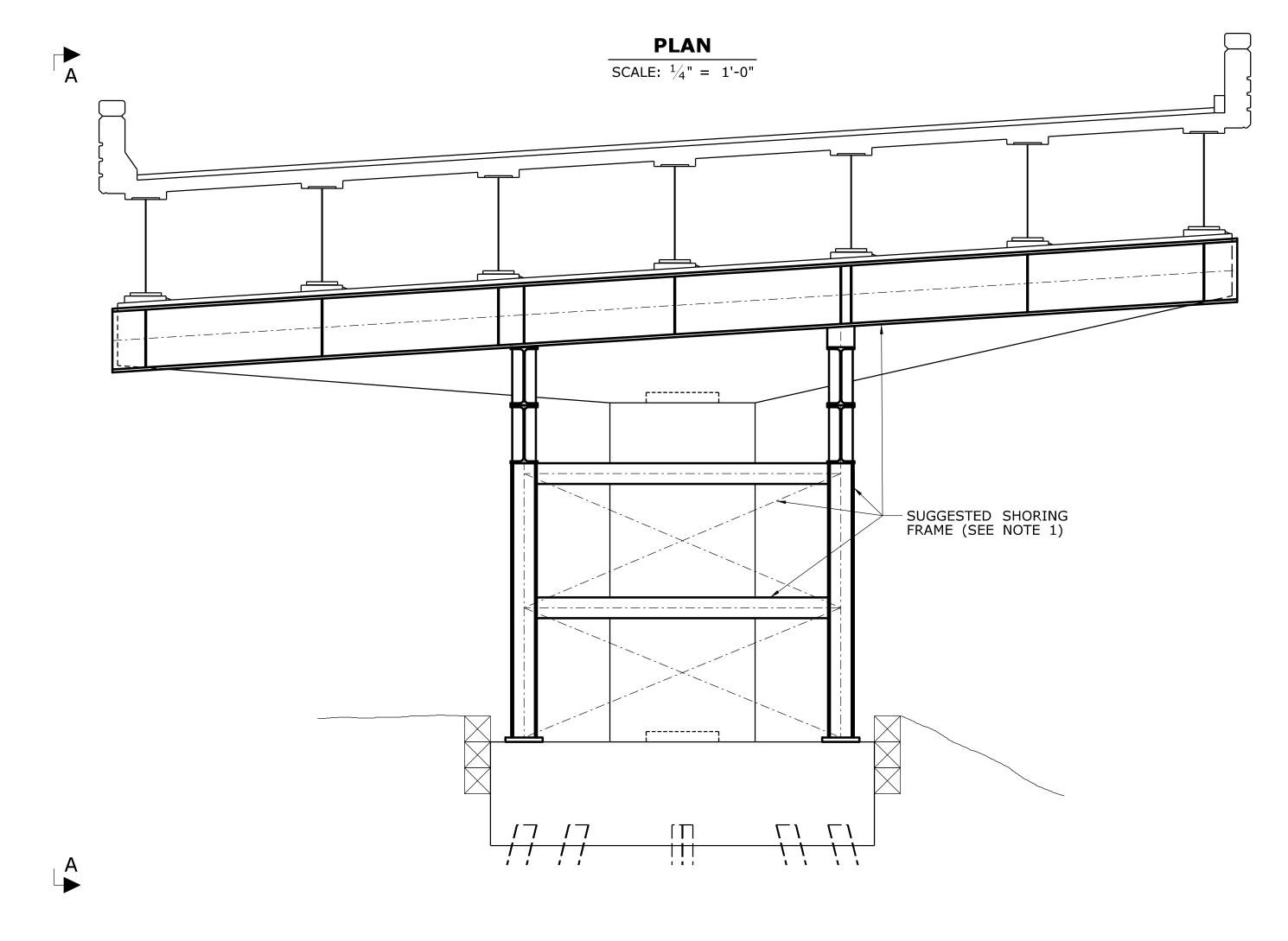
PLAINVILLE & NEW BRITAIN

SUGGESTED TEMPORARY **SUPPORT - 1**

109-0172 DRAWING NO. S-89

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STATE OF CONNECTICUT JRA THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - - -**AML** - | - | -_ - - -**DEPARTMENT OF TRANSPORTATION** - - - -REV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: 7/17/2015 Filename: ...\S-90 SUGGESTED TEMPORARY SUPPORT - 2.dgn



NOTES

REHABILITATION OF BRIDGES 03311, 03312, 03313 03320 & 03322

PLAINVILLE & **NEW BRITAIN**

SUGGESTED TEMPORARY **SUPPORT - 2**

S-90 04.90

109-0172

BRIDGE STRINGER (TYP.) SUGGESTED SHORING FRAME (SEE NOTE 1)

1. THE CONCEPT SHOWN ON THIS DRAWING IS SUGGESTED AND

THE CONTRACTOR, DRAWINGS AND CALCULATIONS SHALL BE

2. AFTER THE SHORING SYSTEM IS NO LONGER REQUIRED, PAVEMENT,

SYSTEM SHALL BE RESTORED TO ITS PREVIOUS CONDITION.

3. CONTRACTOR TO NOTE THAT THE MINIMUM VERTICAL CLEARANCE

CONNECTICUT AND BE SUBMITTED FOR APPROVAL.

THE RAILROAD IS 20'-6".

ILLUSTRATES A TEMPORARY SUPPORT CONCEPT WHERE TEMPORARY COLUMNS AWAY FROM THE EXISTING PILE CAP CANNOT BE UTILIZED DUE TO CLEARANCE RESTRICTIONS (RT. 72, THE RAILROAD, QUINNIPIAC RIVER, ETC.). ACTUAL SHORING DESIGN USED TO BE PROVIDED BY

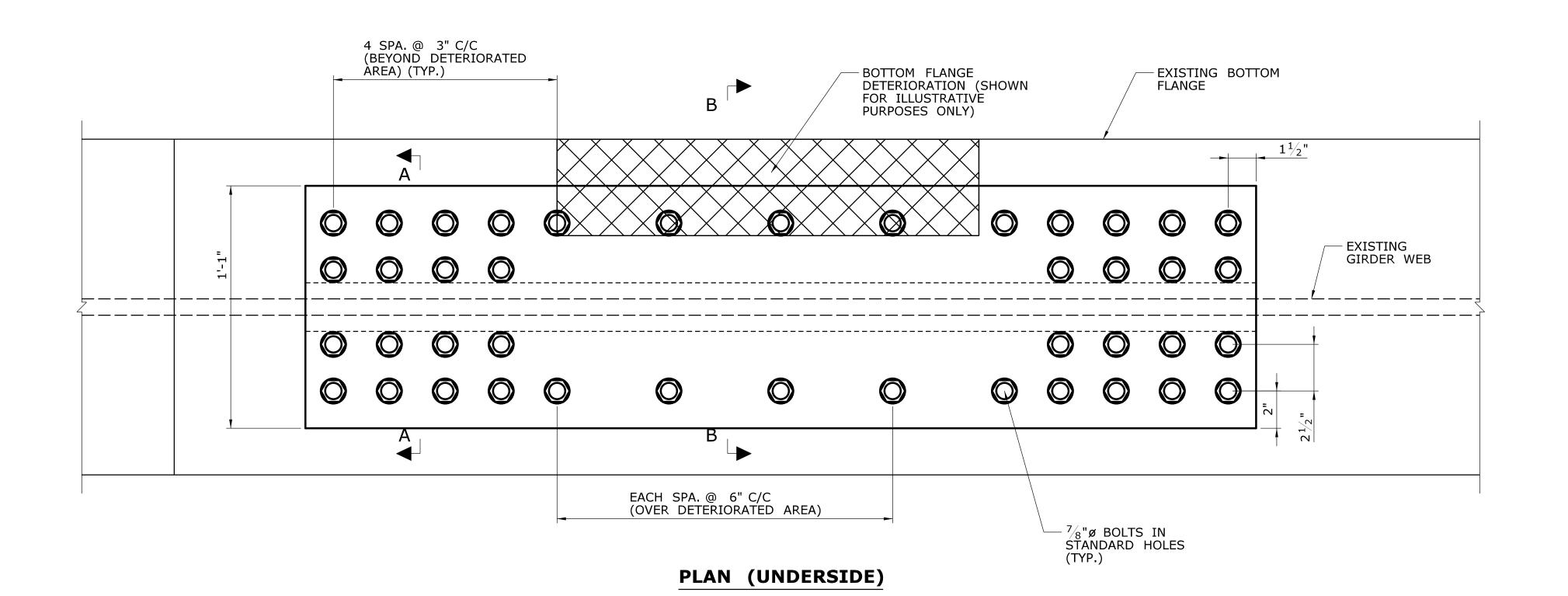
PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF

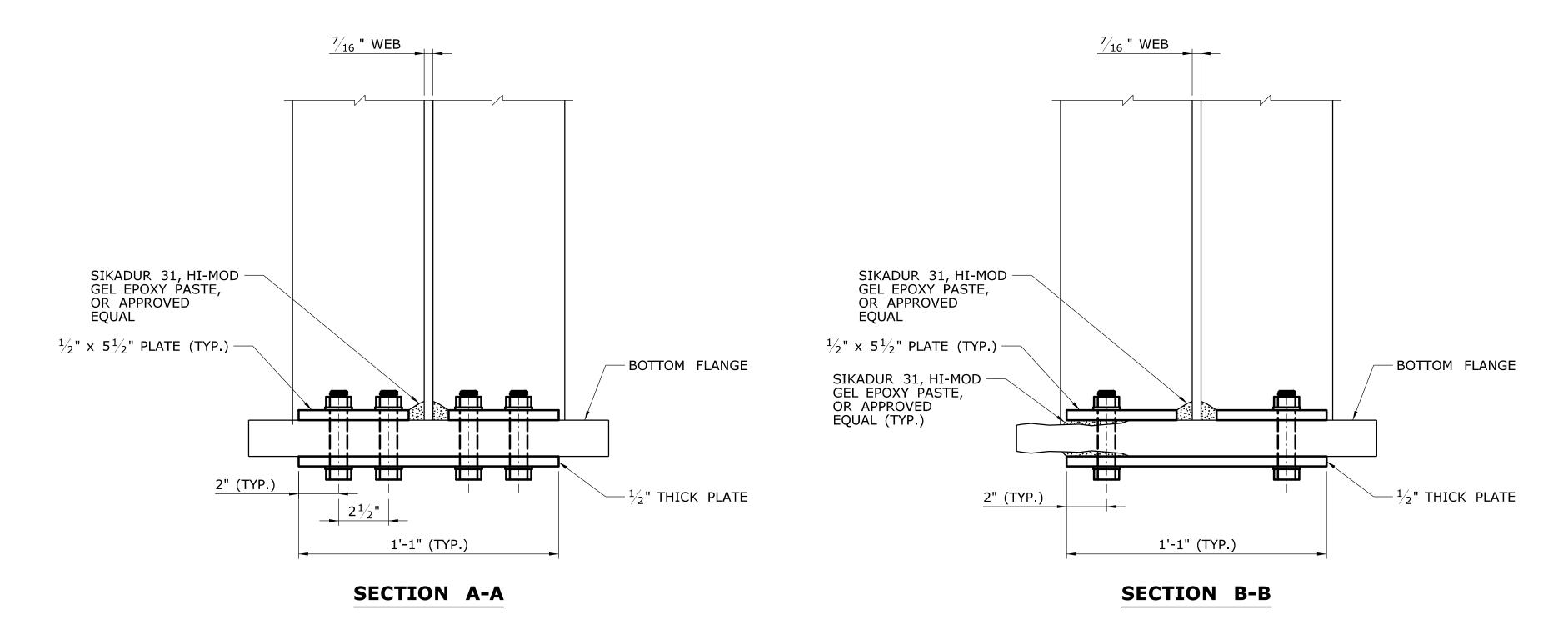
FILL, RAILING, ETC. THAT WAS DISRUPTED TO INSTALL THE SHORING

OVER THE ROADWAY IS 16'-3" (OR EXISTING MINIMUM CLEARANCE, WHICHEVER IS LOWER) AND THE MINIMUM VERTICAL CLEARANCE OVER

> **SECTION A-A** SCALE: $\frac{1}{4}$ " = 1'-0"

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BOTTOM FLANGE REPAIR DETAIL - REPAIR TYPE G1

SCALE: 3'' = 1'-0''

BOTTOM FLANGE REPAIR NOTES

- FOR REPAIR LOCATIONS, SEE DRAWINGS S-15, S-16, S-33, S-34, S-35, S-53, S-54, S-55, S-67, S-79 AND S-80.
- BOLTED CONNECTION SHALL BE CONSIDERED SLIP CRITICAL CONNECTION WITH CLASS B SURFACE CONDITIONS.
- PAINT AND RUST SHALL BE REMOVED FROM THE BEAM SURFACE AT THE REPAIR LOCATIONS PRIOR TO STEEL REPAIRS IN ACCORDANCE WITH THE SPECIAL PROVISION "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL", OR "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)", AS APPLICABLE. WHEN REPAIR LIMITS EXTEND BEYOND LIMITS OF "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)", THE COST OF THIS WORK SHALL BE INCLUDED UNDER THE ITEM "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL", OTHERWISE THIS WORK SHALL NOT BE MEASURED FOR PAYMENT, THE COST OF WHICH SHALL BE INCLUDED IN THE ITEM "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)".
- FURNISHING AND FABRICATING REPAIR PLATES, DRILLING HOLES INTO THE EXISTING BEAMS INCLUDING H.S. BOLTS SHALL BE PAID FOR UNDER THE ITEM "STRUCTURAL STEEL REPAIRS (SITE NO. X)."
- REPAIR PLATE SHALL STOP SHORT OF INTERFERING WITH EXISTING AND PROPOSED BEARINGS BY $\frac{1}{2}$ " MINIMUM.
- INTERRUPT TOP REPAIR PLATES AT STIFFENERS. PROVIDE 1/2" CLEARANCE BETWEEN STIFFENER AND REPAIR PLATES.
- 7. THE COST OF EPOXY GEL SHALL BE INCLUDED IN THE ITEM "STRUCTURAL STEEL REPAIRS (SITE NO. X)".

| - | _ | - | - | THE INFORMATION, INCLUDING ESTIMATED |
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| - | _ | - | - | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE |
| _ | _ | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
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SHEET NO. Plotted Date: 7/17/2015

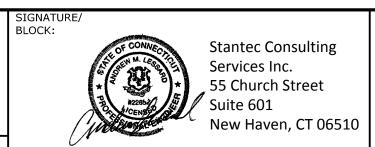
REVISION DESCRIPTION

REV. DATE

JRA **AML**

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION**

Filename: ...\S-91 STEEL REPAIR DETAILS - 1.dgn



STATE PROJECT NO. 109-172 **REHABILITATION OF** FIVE BRIDGES

PLAINVILLE & **NEW BRITAIN** DRAWING TITLE:

DRAWING NO. S-91

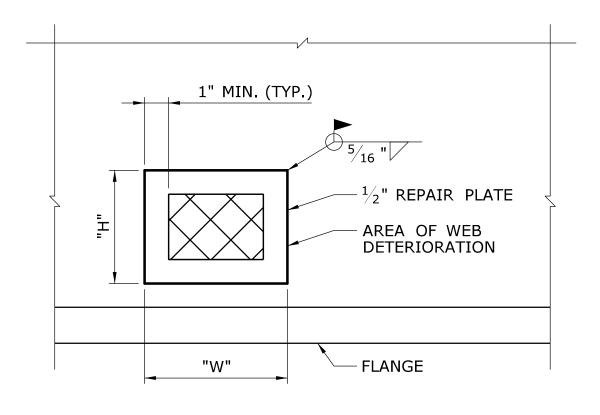
STEEL REPAIR **DETAILS - 1**

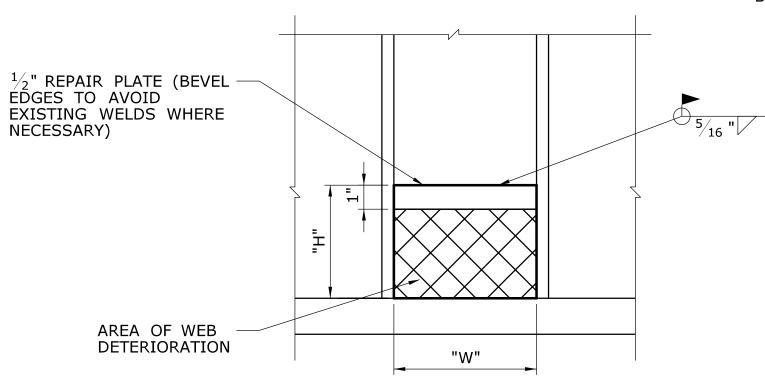
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STEEL REPAIR NOTES:

- 1. SEE FRAMING PLANS FOR LOCATIONS OF REQUIRED REPAIRS.
- 2. SIZE OF STEEL DETERIORATION SHALL BE FIELD VERIFIED PRIOR TO FABRICATING REPAIR PLATES.
- 3. STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270, GRADE 50 T2.
- 4. WELDING DETAILS, PROCEDURES AND TESTING METHODS SHALL CONFORM TO THE ANSI/AASHTO/AWS D1.5M (2010) BRIDGE WELDING CODE WITH CURRENT INTERIMS, UNLESS OTHERWISE NOTED ON THE PLANS.
- 5. PAINT AND RUST SHALL BE REMOVED FROM THE BEAM SURFACE AT THE REPAIR LOCATIONS PRIOR TO STEEL REPAIRS IN ACCORDANCE WITH THE SPECIAL PROVISION "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL", OR "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)", AS APPLICABLE. WHEN REPAIR LIMITS EXTEND BEYOND LIMITS OF "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)", THE COST OF THIS WORK SHALL BE INCLUDED UNDER THE ITEM "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL", OTHERWISE THIS WORK SHALL NOT BE MEASURED FOR PAYMENT, THE COST OF WHICH SHALL BE INCLUDED IN THE ITEM "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)".
- 6. ALL FIELD FILLET WELDS SHALL BE TESTED BY MAGNETIC PARTICLE METHOD.





END DIAPHRAGM AND CONNECTION PLATES TO BE CLEANED AND PAINTED 1.5 X "D" LIMIT OF BEARING PAINTING (SEE NOTE 1)

PAINTING NOTES

- 1. CLEAN AND PAINT ENDS OF ALL GIRDERS INCLUDING END CROSS FRAMES, STIFFENERS AND ALL STEEL COMPONENTS OF FIXED BEARINGS AT ALL PIERS AND ABUTMENTS. TO BE PAID FOR UNDER "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)."
- BRIDGE 03313 BEAM P7-1 SHALL BE PAINTED IN ITS ENTIRETY. TO BE PAID FOR UNDER THE ITEM "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 3)".

TYPICAL WEB REPAIR

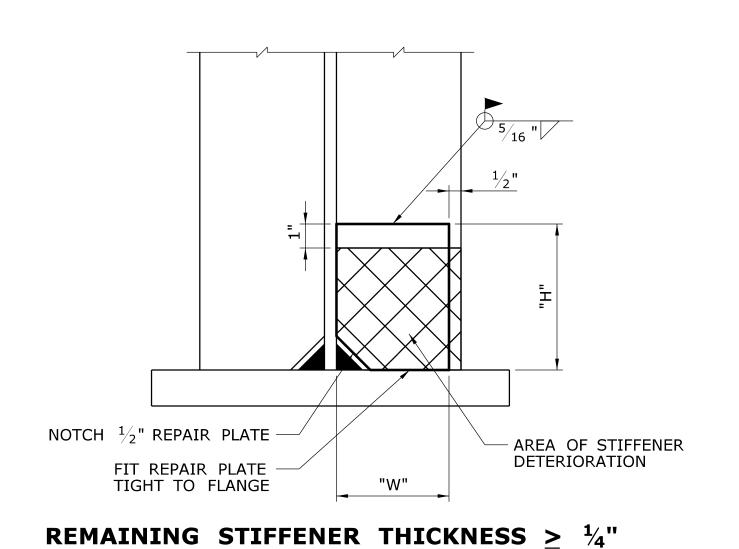
NOTE: AT PERFORATIONS, INSTALL PLATES AT EACH SIDE OF WEB

BETWEEN STIFFENERS

STEEL PAINTING DETAIL

WEB REPAIR DETAILS - REPAIR TYPE G2

SCALE: 3'' = 1'-0''



SHEET NO. Plotted Date: 7/17/2015

CUT AND REMOVE — SECTION OF DETERIORATED STIFFENER NOTCH $1\frac{3}{8}$ " REPAIR PLATE FIT REPAIR PLATE TIGHT TO FLANGE "W"

- 1³/₈" REPAIR PLATE (GRIND TO FIT)

SECTION A-A

NOT TO SCALE

AT MISSING OR BROKEN WELD LOCATIONS, INSTALL NEW WELD. TYP. ALL ANGLE ENDS

CROSS FRAME CONNECTION WELD REPAIR DETAIL - REPAIR TYPE CF1

NOT TO SCALE

WELD REPAIR NOTES

- SEE DRAWINGS S-15, S-16, S-33, S-34, S35 FOR WELDING LOCATIONS. WORK TO BE INCLUDED IN THE ITEM "REPAIR DEFECTIVE WELDS."
- 2. PRIOR TO APPLYING THE HEAT OF WELDING/CUTTING EQUIPMENT TO LOCALIZED AREAS OF EXISTING STEEL, THE EXISTING PAINT SHALL BE REMOVED ON EACH FACE OF STEEL TO A WIDTH OF 6" FROM WHEREVER THE HEAT WILL BE APPLIED, OR AS DIRECTED BY THE ENGINEER. THE PAINT REMOVAL AND REPAINTING OF EXISTING STEEL TO BE PAID FOR UNDER "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL".
- WHERE WELD HAS BEEN CRACKED AND ANGLE LEGS BENT DUE TO PACK RUST, REMOVE PACK RUST AND HEAT STRAIGHTEN ANGLE LEG PRIOR TO PLACEMENT OF NEW WELD. WORK SHALL BE INCLUDED UNDER THE ITEM "REPAIR DEFECTIVE WELDS."

STIFFENER REPAIR DETAILS - REPAIR TYPE G3

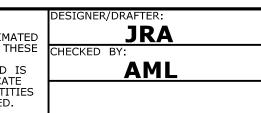
REMAINING STIFFENER THICKNESS $< \frac{1}{4}$ "

SCALE: 3'' = 1'-0''

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| - | - | - | - | THE CONDITIONS OF ACTUAL QUANTITIES |
| - | - | - | - | OF WORK WHICH WILL BE REQUIRED. |
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REVISION DESCRIPTION

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Filename: ...\S-92 STEEL REPAIR DETAILS - 2.dgn



STATE PROJECT NO. 109-172 **REHABILITATION OF** FIVE BRIDGES

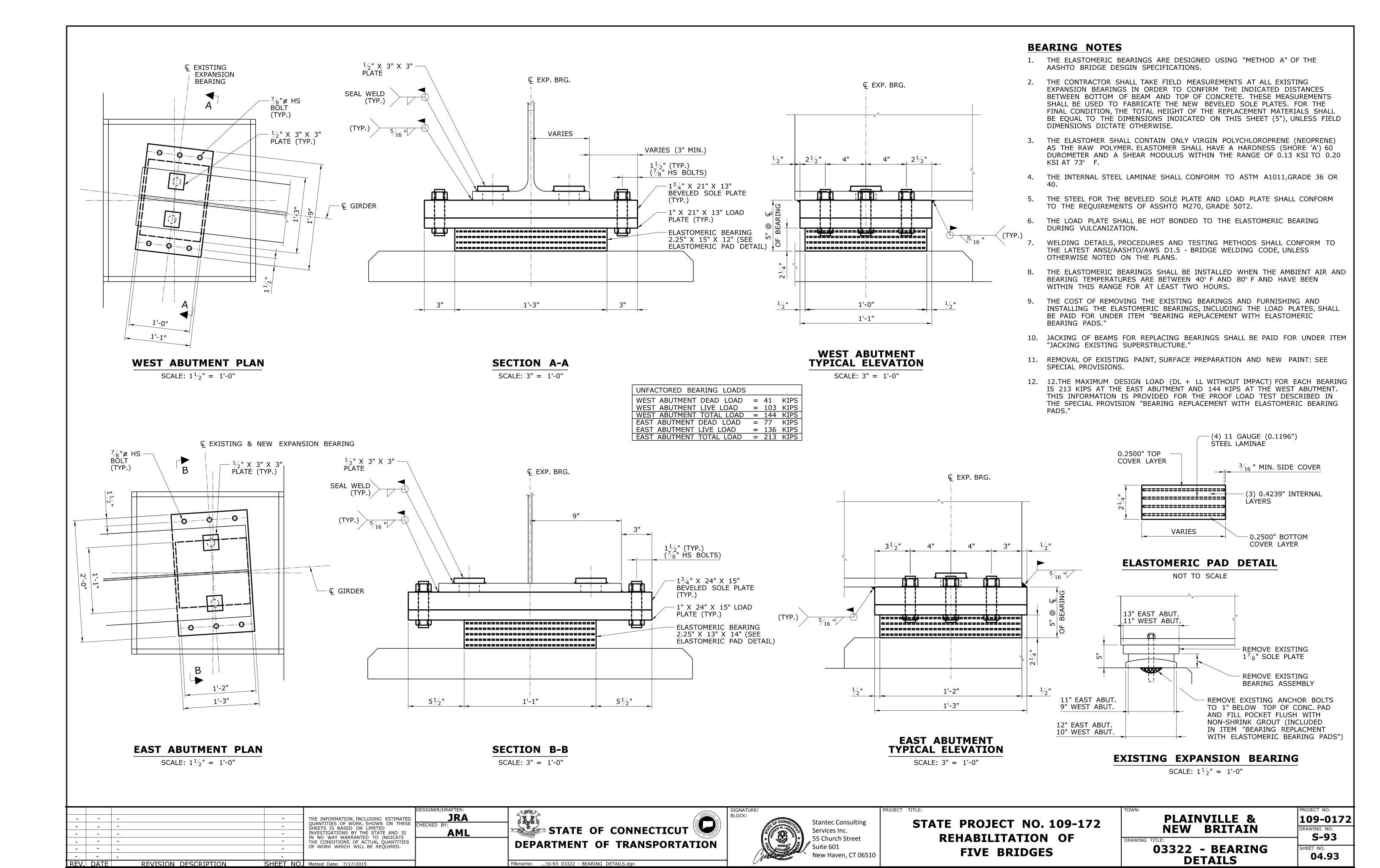
PLAINVILLE & **NEW BRITAIN**

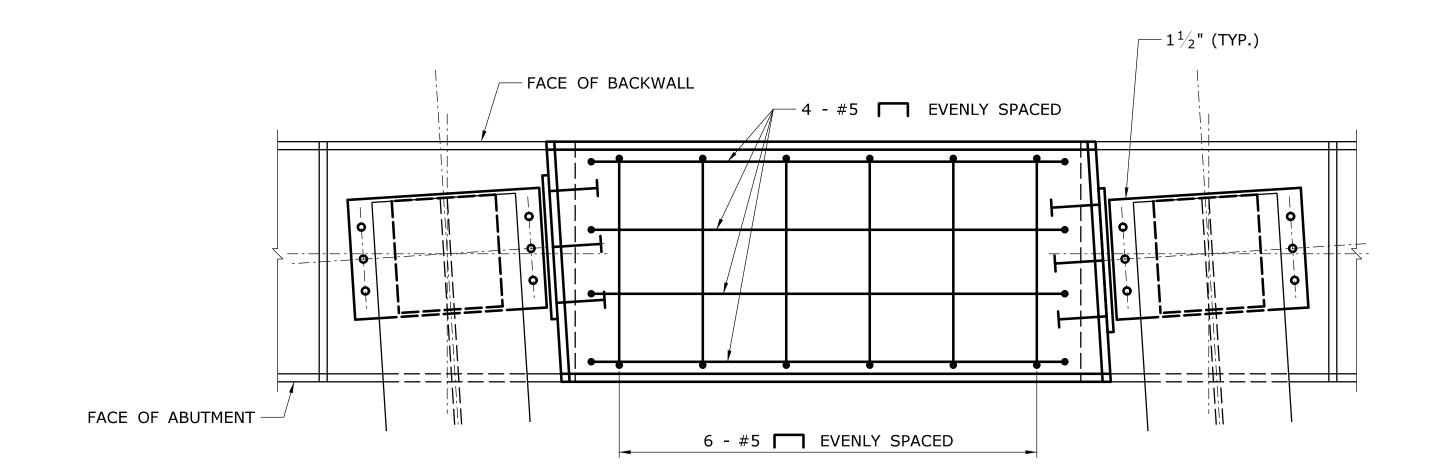
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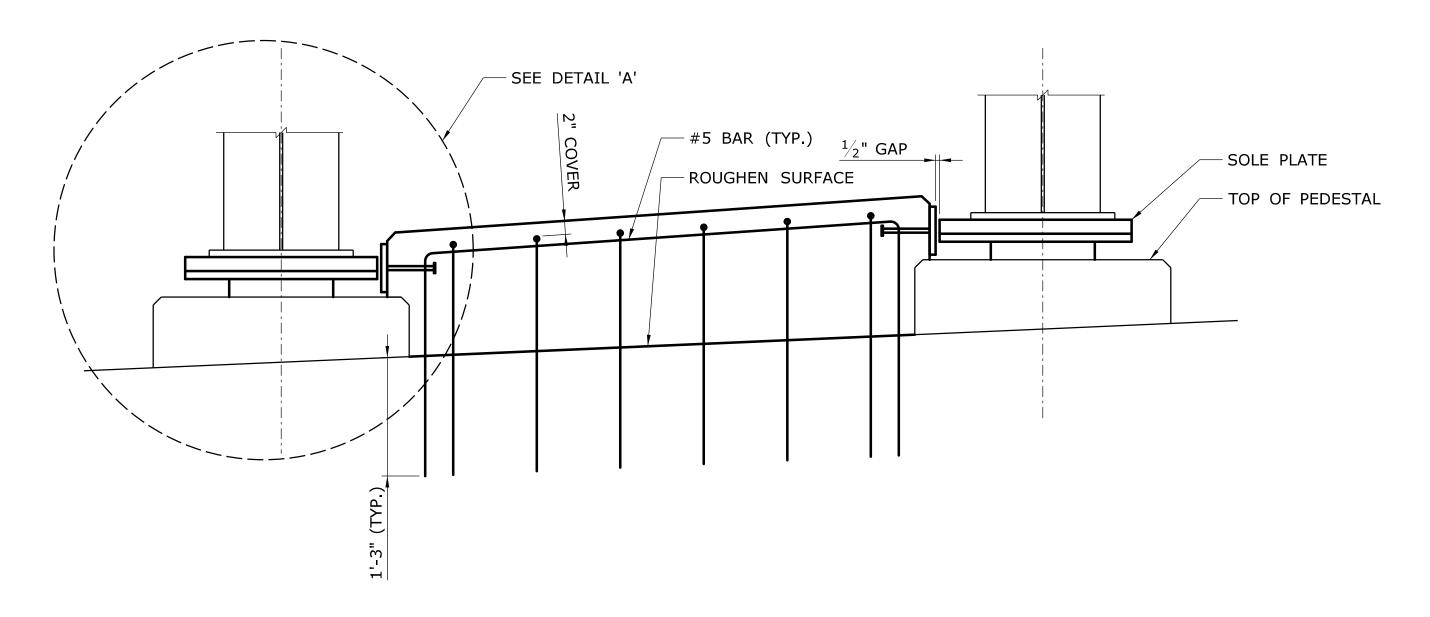
DRAWING TITLE: STEEL REPAIR **DETAILS - 2**





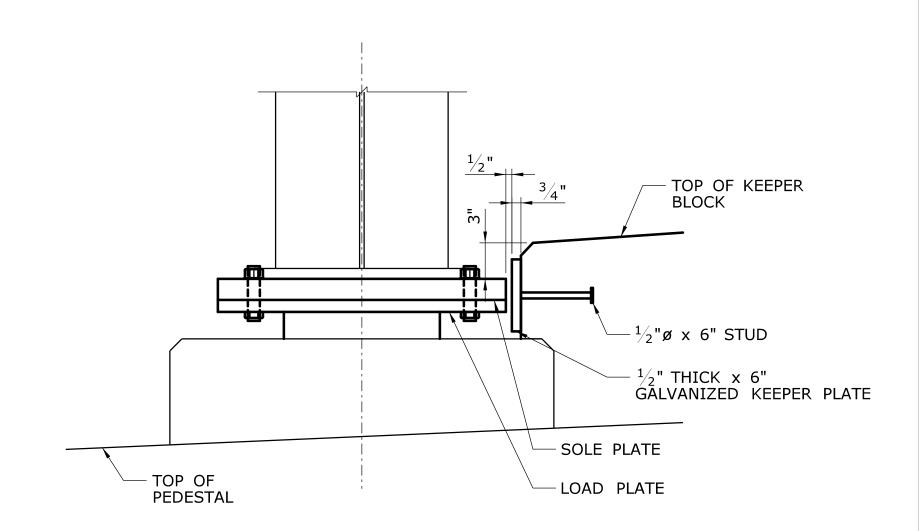
KEEPER BLOCK PLAN (EAST ABUTMENT SHOWN, WEST ABUTMENT SIMILAR)

SCALE: 1'' = 1'-0''



KEEPER BLOCK SECTION (EAST ABUTMENT SHOWN, WEST ABUTMENT SIMILAR)

SCALE: 1" = 1'-0"



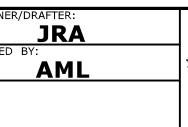
DETAIL 'A'

SCALE: $1\frac{1}{2}$ " = 1'-0"

CONCRETE KEEPER BLOCK NOTES

- 1. CONCRETE FOR KEEP BLOCKS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI WITH $^3/_8$ " MAX. AGGREGATE.
- 2. REINFORCEMENT SHALL BE UNCOATED AND CONFORM TO ASTM 615, GRADE 60. ALL REINFORCING SHALL HAVE 2" COVER, UNLESS DIMENSIONED OTHERWISE.
- 3. STEEL KEEPER PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270, GRADE 50 AND BE HOT-DIP GALVANIZED ACCORDING TO THE REQUIREMENTS OF ASTM A123 AFTER STUDS HAVE BEEN ATTACHED.
- 4. THE KEEPER BLOCKS SHALL BE CONSTRUCTED AFTER THE ELASTOMERIC BEARINGS HAVE BEEN INSTALLED. KEEPER PLATES AND TOP OF KEEPER BLOCK SHALL BE LOCATED RELATIVE TO THE INSTALLED LOCATION OF THE BEVELED SOLE PLATE AND LOAD PLATE, AS SHOWN ON THE KEEPER BLOCK DETAIL.
- 5. WHEN DRILLING HOLES IN THE PIER CAPS, THE CONTRACTOR SHALL AVOID ALL EXISTING REINFORCEMENT. A PACHOMETER SHALL BE USED TO LOCATE THE EXISTING REINFORCEMENT. THE HOLE DIAMETER AND DEPTH SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE CHEMICAL ANCHORING MATERIAL FOR THE REINFORCING BAR SIZE SPECIFIED.
- 6. PRIOR TO PLACING THE CONCRETE, THE EXISTING CONCRETE SURFACES SHALL BE CLEANED AND FREE OF DIRT, DUST, AND OTHER FOREIGN MATTER. THE ROUGHENED SURFACES SHALL BE DAMPENED WITH WATER JUST PRIOR TO PLACING THE CONCRETE. ANY STANDING WATER SHALL BE REMOVED.
- 7. THE COST OF CONSTRUCTING THE KEEPER BLOCKS, INCLUDING REINFORCING, DRILLING AND GROUTING OF DOWELS, AND STEEL KEEPER PLATES WITH STUDS, SHALL BE INCLUDED IN THE ITEM "CONSTRUCT CONCRETE KEEPER BLOCKS".

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| - | - | - | 1 | INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE | |
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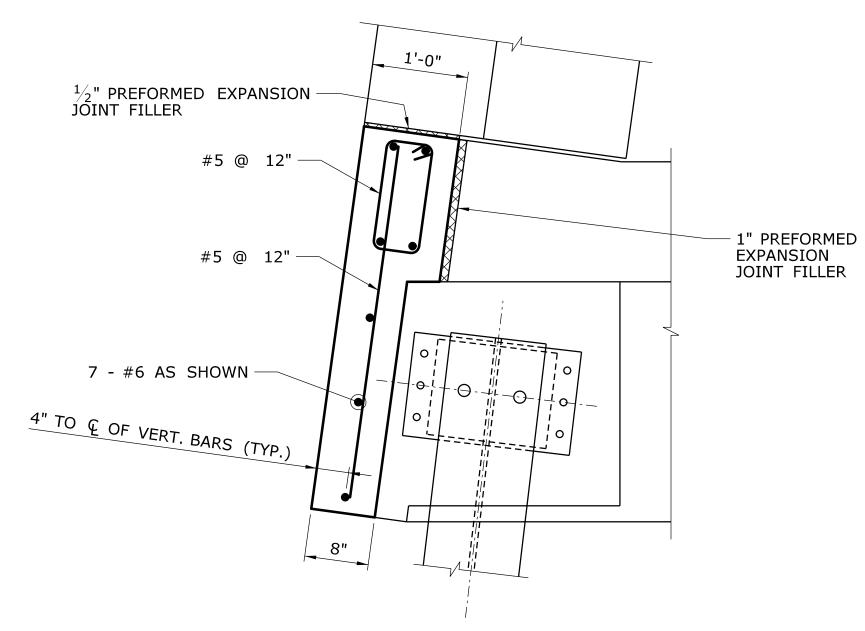
STATE PROJECT NO. 109-172 REHABILITATION OF FIVE BRIDGES

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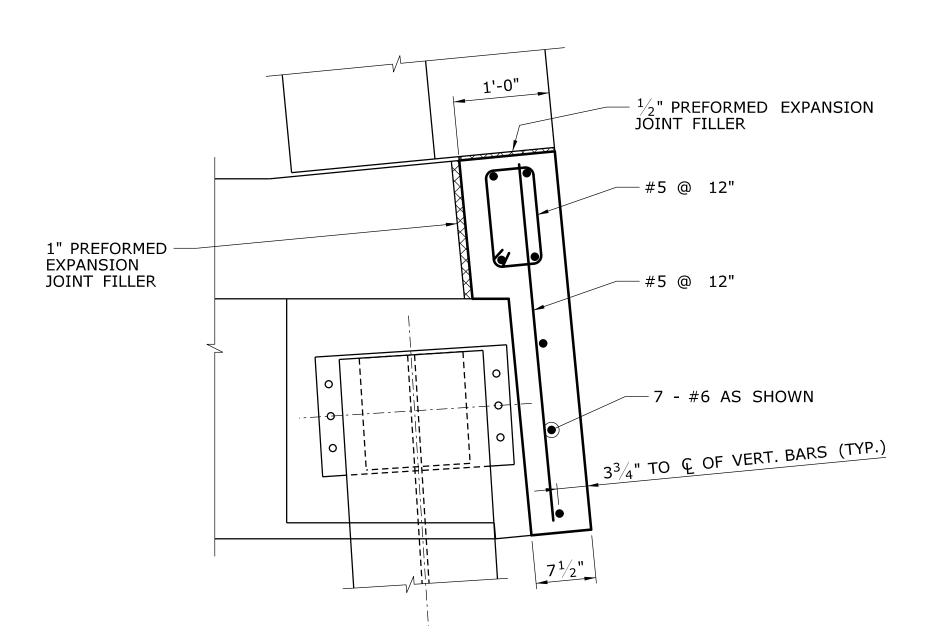
03322 - KEEPER BLOCK DETAILS

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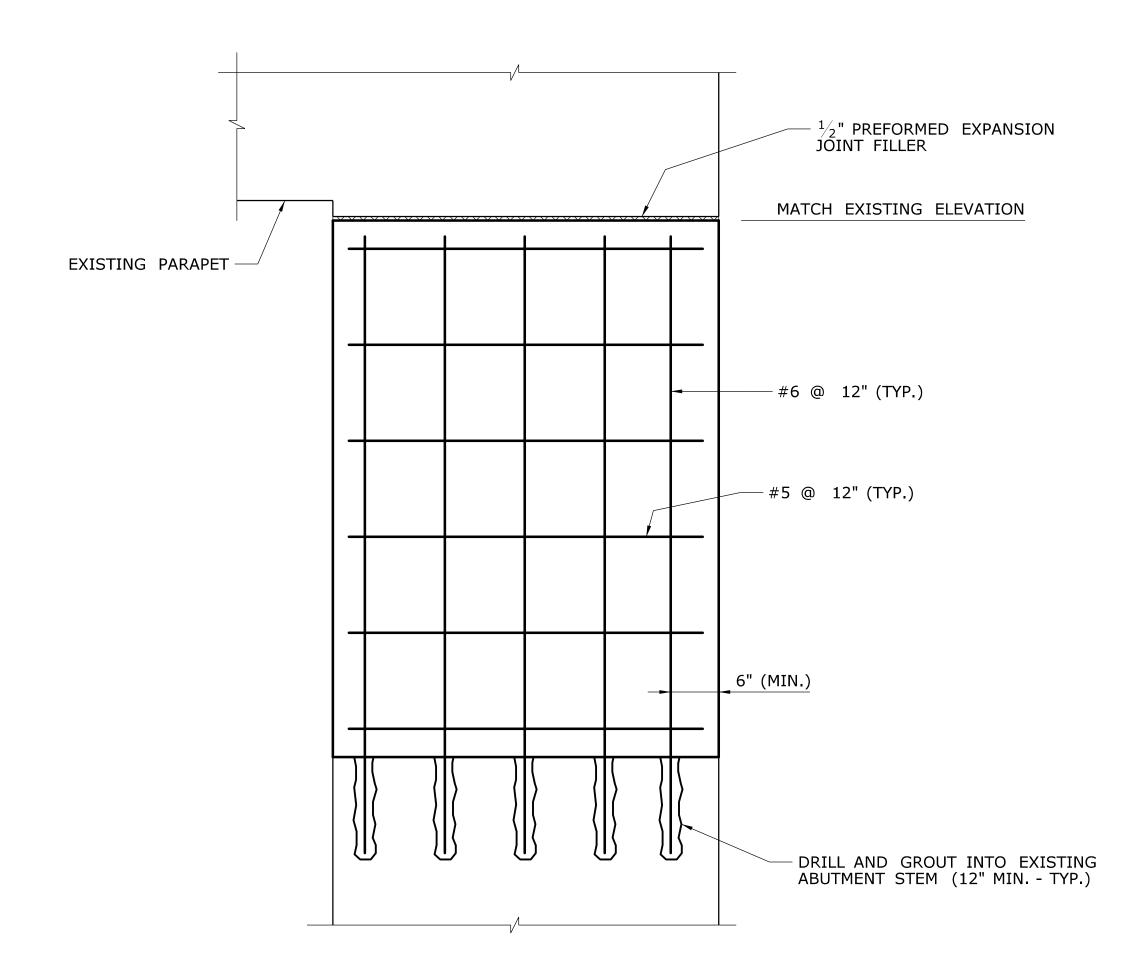


ABUTMENT 1 - SOUTHWEST CHEEK WALL PLAN

SCALE: 1" = 1'-0"



ABUTMENT 2 - SOUTHEAST CHEEK WALL PLAN SCALE: 1'' = 1'-0''



TYPICAL CHEEK WALL ELEVATION

SCALE: 1'' = 1'-0''

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - - -- | - | -- - -- - -REV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: 7/17/2015

STATE OF CONNECTICUT JRA **AML DEPARTMENT OF TRANSPORTATION**



STATE PROJECT NO. 109-172

REHABILITATION OF FIVE BRIDGES

| TOWN: | | |
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| | NEW | BRITAI |
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1. REMOVAL OF EXISTING CHEEK WALL CONCRETE TO BE PAID FOR UNDER THE ITEM "REMOVAL OF EXISTING MASONRY".

2. NEW CHEEK WALL CONCRETE TO BE PAID FOR UNDER THE

REINFORCING FOR CHEEK WALLS TO BE PAID FOR UNDER

EXPANSION JOINT FILLER TO BE PAID FOR UNDER THE ITEM $\frac{1}{2}$ " PREFORMED EXPANSION JOINT FILLER FOR BRIDGES OR '1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES' AS

DRILLING AND GROUTING OF DOWELS SHALL BE PAID FOR

UNDER THE ITEM "DRILLING HOLES AND GROUTING

CHEEK WALL NOTES:

APPLICABLE.

DOWELS".

ITEM "CLASS 'F' CONCRETE".

THE ITEM "DEFORMED STEEL BARS".

DRAWING TITLE: **03322 - CHEEK** WALL DETAILS

S-95 04.95

109-0172

New Haven, CT 06510 Filename: ...\S-95 03322 - CHEECK WALL DETAILS.dgn